THE CULTIVATOR.

A CONSOLIDATION OF BUEL'S CULTIVATOR AND THE GENESEE FARMER.

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THE CULTIVATOR.

"TO IMPROVE THE SOIL AND THE MIND."

Our Next Volume.

THE present number closes the 8th volume of the CULTIVATOR, and we shall commence the 9th on the 1st of January next. It would be idle to deny that we have not been gratified at the extensive circulation the Cultivator has received,—(a circulation unequaled by any agricultural journal in this, and we believe, in any other country,)—and with the general expression of approbation which our labors in the cause of an improved husbandry have called forth from those best qualified to judge, the farmers of our wide-spread country. We shall commence our new volume under peculiarly favorable auspices. Our list of valuable correspondents has been greatly augmented the present year, and our arrangements for foreign correspondence and publications are now so perfect that we shall receive as soon as published, nearly or quite all the agricultural journals or works of interest, from the Old World. The course and character of the Cultivator is so well understood, that it is only necessary to say that every effort will be made by the conductors to fully sustain the high reputation the work has already acquired for usefulness, as well as excellence of mechanical execution. The numerous illustrations will be continued; and such arrangements have been made as will give additional facilities for increasing the value of this important feature of the Cultivator.

To those numerous friends and correspondents, who have furnished such a mass of most important and useful facts for our paper the past year, we tender our most grateful acknowledgments. They have the satisfaction of knowing that their papers have passed into the hands of more than twenty thousand of the most able theoretical and practical farmers of the United States, and exercised a proportionate influence on the public mind. We cannot doubt they will still feel a pleasure in lending their aid to disseminate agricultural information, by furnishing such facts, farm reports, notices of crops,—improved implements,—valuable breeds of cattle, sheep or other animals,—and all such other matter as shall assist in elevating the character, improving the condition, and increasing the knowledge of the American farmer.

Our sincere thanks are also due to the many friends of agriculture, editors of the public press, postmasters, professional men, and others, who have aided us, and, as we hope, benefited the farmer by bringing our work to the notice of their friends, and procuring and forwarding names as subscribers to the Cultivator. That aid we trust will be still continued,—and all favors of the kind will be reciprocated by us as far as is in our power.

☞ The Index, Title page, &c. to the present volume will be sent to all our subscribers in the course of the next fortnight.

A Word to Our Subscribers.

AT the suggestion of some of our friends, who think many of our subscribers would be greatly accommodated by such a course, we have concluded to send the next volume of the Cultivator to all our present subscribers, instead of waiting for them to renew their subscriptions as heretofore, except in cases where a discontinuance may be ordered; and, as we hope to part with but few of those who have accompanied us the past year, we would respectfully request such of our present subscribers as may find it convenient, on taking this number from the post-office, at once to hand over their dollar, either to the postmaster, who will forward it to us, or to such agents of the paper as may be most convenient. Subscribers may also confer a favor on their farming friends who do not receive such a paper, as well as on us, if they show them a copy of our Journal and procure their subscriptions.

English Correspondence.

THE readers of the Cultivator will remember the account we gave in the August No. of the current volume of some interesting experiments made by JOHN HANNAM, Esq. of North Deighton, Yorkshire, on the early harvesting of wheat, showing the decided advantages of such a practice. We have the pleasure now of laying before our readers some extracts from a letter received from that gentlemen, dated the 6th of October, from which it appears he has continued or repeated his experiments the present year with the same results; and the reasons he gives for the practice we think are such as will commend themselves to the attention of our farmers:

"If I have been slow in replying to your kind communication, I beg you will attribute it not more to a pressure of many avocations than to a desire to return something more useful or interesting than mere sounding words: and this, I think, I shall do, when I tell you that I have, according to my promise in the Quarterly Journal, carried on my experiments on reaping wheat, on a much more comprehensive scale than I did last year. Though unable to state to you the particular results, from the fact of each variety being in stack, (where I intend them to remain till after Christmas,) I may venture to say that the sample cut *raw* (or a fortnight before it was ripe) will be the best. This opinion I now give not on the strength of my last year's experiments, but from a more practical and direct evidence, having thrashed a sheaf of each variety, for the purpose of exhibiting the samples, at the annual meeting of our Wetherby Agricultural Society, at which time they were viewed by thousands, whose unanimous opinion was in favor of the raw—an opinion confirmed by the judges, who awarded me a premium of £1, with a *high commendation of the raw sample.*"*

"I am happy to be able to say that the harvest is now over in this part of the country, and that it has been a very favorable one for those who were as stirring as they ought to be. A fortnight's rain (which has only afforded the late farmers an opportunity of securing their crops a few days ago) has injured some little wheat, and much barley and oats. Where this has happened, in my opinion, the farmer has no one to blame but himself. Too frequently do we see him wasting his time at the beginning of harvest, by waiting till his corn is dead ripe, to the detriment of his crops, and to the great risk of bad weather coming on. This I have seen in many cases this year, and had I a season to point out, to corroborate my former remarks on the value of the *time* we gain by beginning our wheat harvest early, I could not find one that would do it so well as the present one—nor could I find a better illustration of the *greater chance of securing the crop*, which I stated in my paper on reaping wheat, was afforded by cutting early, than is afforded in this immediate neighborhood. Thus on a certain farm in this neighborhood, the wheat (which was rather backward) was cut in a raw state—the first result of which was, that it was safely housed before the wheat on some farms in the vicinity was reaped. But this was only the 'beginning of the end,' (to use a Gallicism.) The wheat cutting being over early, the barley and oats were cut down, and consequently secured in a much shorter time than they would if the wheat had been left to get ripe; more especially as this wheat was not so forward in ripeness as some in the neighborhood;—in fact the whole of the 'white corn' on this farm was secured in fine condition, before the rainy weather began, while upon many farms, where the corn was in an equally forward condition, some wheat and much of the spring corn has been damaged. Such would have been the case upon this farm, if the fine weather at the beginning of the harvest had not been made use of.

"If it be said, and it has been in my hearing, that it 'happened so,' and that the 'latter end of harvest *might have been* finer weather than the beginning;' then would I beg to urge that in such an event the reaping might have been delayed; for if the *weather is unfavorable for early reaping, we can wait till the grain is ripe*, in hopes of a better late harvest, but where we have fine weather at the beginning, and we do not use it, we have afterwards no *dernier resort*, no alternative, but to take the weather as it may come. And for this, as one reason, I say, when the weather is fine for early cutting—*e. g.* this year—'make hay while the sun shines;' for fine weather is too valuable to be wasted anywhere, but in a climate so fickle as our own, we ought especially to 'seize the moments as they fly.' And such is my estimate of the value of this promptitude, that it is my firm opinion that by adopting it more generally, and by an equally prompt method, *sowing* our wheat before the season gets so far advanced, it is in our power to lessen materially the risk of harvest, and to guard, in a great measure, against that damage from bad weather, which, when it does happen to the crop, is a *loss not only to the farmer but to the whole community.*"

* In an interesting report of the "Wetherby Agricultural Show," which we find in the "Leeds Intelligencer," is the following notice of Mr. Hannam's experiments the present year: "Mr. John Hannam of North Deighton, Wetherby, a Corresponding Member of the New-York State Agricultural Society, exhibited four samples of thrashed wheat which had been cut in one field at Deighton, at different periods of the present year: the three first at intervals of a week each, and the last a fortnight after the third sample. The experiment had demonstrated to the satisfaction of all who viewed the different samples, that the third sample, which was cut in what is called the raw state, a fortnight before the grain was ripe, was by far the most superior. And not only is the grain better, but the straw is stated to be nearly twenty per cent superior to that which is suffered to grow till fully ripe. Mr. Hannam made similar experiments last year, which are recorded in the Quarterly Journal of Agriculture of the Highland Society of Scotland for June, 1841; in the Farmer's Magazine for July, 1841; and the New-York Cultivator for August, 1841. The judges awarded £1 for these samples." Mr. Hannam also received the premium of £5 for the best hunter, there being eighteen entries against him.

Highland Agricultural Society.

IN the New Farmer's Journal, and in a supplement to the Mark Lane Express, we find full accounts of the Annual Meeting and Show of the Highland Agricultural Society of Scotland, which, in the magnitude of its operations, the number of its premiums, the amount bestowed, and the influence exerted, was long the most active society in the world, and is even now second only to the Royal Agricultural Society of England. It was held at Berwick in the last week of September, and as usual drew together an immence concourse of the best and most public spirited farmers and land-owners of Scotland. More than 1,000 animals were present for exhibition, among which were about eighty Short Horns of the most beautiful kinds. Forty Short Horn bulls were offered for premiums in the several ages, and twenty-one were entered for the first premium, which was £100. The weather, much of the time, was very unfavorable, but the arrangements were so perfect as in a great degree to obviate this inconvenience. We find that at these meetings of the Highland Society, as well as those of the Royal English one, the price of admission to the yards, exhibition of implements, &c., is fixed at a certain rate, and a very large part of the funds of the societies are derived from this source.

The good which this noble society has effected in Scotland is incalculable. It may in fact be said to have revolutionized the character of Scottish Agriculture, and increased the products of the soil in the aggregate more than two-fold. The best animals of the best breeds; the best agricultural implements, and the most perfect systems of husbandry have succeeded the worst of each kind, that were to be found in Great Britain. Long may it continue to flourish, and its usefulness to increase and extend.

"Virtue, like fire, turns all things into itself; our actions and our friendships are tinctured with it, and whatever it touches becomes amiable."

NEW PUBLICATIONS.

The New American Orchardist

Or an account of the most valuable varieties of Fruit, of all climates, adapted to cultivation in the United States; with their History, modes of culture, management, uses, &c. With an Appendix on Vegetables, Ornamental Trees, Shrubs and Flowers, the Agricultural resources of America, and on Silk, &c. By WILLIAM KENRICK. *Third edition, enlarged and improved. Boston: Otis, Broaders & Co.* 1841.

SOME seven miles from Boston lie the heights of Nonantum, celebrated at a very early day in the history of New-England, and the place where the first Indian church and congregation, under the Apostle of the Indians, Mr. Elliot, used to assemble. It is now more celebrated for the beautiful prospect from its summit, unequaled perhaps in New-England; but still better known as the residence of the Kenricks, William and John, and their beautiful and extensive gardens and nurseries. Their farms consist of from 70 to 90 acres each; that of the first lying on the western slope of Nonantum, and of this the nurseries occupy some thirty acres; while the other, called Nonantum Dale, lies in the valley, and the nurseries here embrace a great variety of fruits, flowering shrubs, &c. most interesting to the orchardist,. or the lover of the beautiful. It is probable that a greater variety of forest trees, fruit trees, flowering trees, shrubs, &c. can be found in these gardens and nurseries than at any other establishment in the country, one or two only excepted; and the business done by them, as evinced by their annual sales, must be very satisfactory.

William Kenrick, the elder of the brothers, is the author of the book, the full title of which is given above; and we have stated the above facts for the purpose of showing that he is not unacquainted with the subject of which he treats; but that his ample experience, and facilities for observation, entitle him to speak with confidence. This third edition is merely said to be enlarged and improved, but any one who will take the trouble of comparing it with the former editions, will see from the quantity of valuable matter added, and the superior arrangement, as well as the greater clearness of the descriptions, that the work is essentially a new one.

Embracing, as the volume now does, an introductory dissertation on the growth, management, propagation, transplanting, diseases, and general culture of fruit trees; ample lists and descriptions of all the most valuable apples, pears, plums, peaches, cherries, &c. known in this country, with many of the most celebrated ones abroad; a catalogue of the vegetables suitable for the garden, and the best mode of culture; and a descriptive catalogue of the choicest ornamental trees, shrubs, and flowers, it may be considered one of the most complete works of the kind, and one which should be in the hands of every man who owns an orchard or a garden.

The getting up of this edition is very good, and we are glad to say that in this matter American publishers are making great advances, and we believe at the same time consulting their own interests in so doing. We would, however, hint to Mr. Kenrick, that if he will, in his next edition, give colored engravings of some of the most celebrated fruits and flowers in the style of McIntosh's London Orchardist, he would add greatly to its value and attractions. We know of no work extant on the subject of the orchard, which we can so cheerfully recommend to the farmer, and the lover of good fruit, as this edition of the American Orchardist.

Prof. Hitchcock's Elementary Geology.

WE do not know when we have taken up an elementary work on any science, and examined it with more pleasure than this one of Prof. Hitchcock; or laid one down with a more perfect conviction of its adaptation to the purposes contemplated by the writer. Geology has assumed the rank of a science, second in its importance and results to few; it is so intimately interwoven with most of the great questions of natural, and we may add moral philosophy, that a knowledge of its principles, and what it proposes to teach, and the manner in which it teaches is necessary to all. To the farmer, geology is peculiarly interesting. The soil he cultivates, the earth he treads upon, the rocks he piles for fences or bores for water, are all the result of the changes with which geology has to do; and even the plants and trees now growing, or which man wishes to cultivate, are greatly influenced by the revolutions and mutations which the crust of the earth has undergone. Fears have been entertained that geology would be found in conflict with revelation, but the progress of the science has shown these fears were without foundation, and that the truths which geology reveals, like those of astronomy, add to the evidence already existing of the divine origin of the Bible. The numerous cuts and engravings which illustrate the volume, particularly the Paleontological Chart, and the sectional profiles, greatly add to its value as an elementary work, rendering what might otherwise be difficult to understand, plain to the student. The researches and discoveries of Prof. Agassiz on the effect of glaciers and icebergs in modifying the surface of the globe and in raising those banks of rocks, sand, gravel, &c. so common, have enabled Prof. Hitchcock to add to this, his second edition, a most valuable chapter on these topics. To the various instances of these *moraines* which he has noticed in our country, it has occurred to us that he has omitted one which may be referred to this source, but which has hitherto been an inexplicable enigma so far as its formation is concerned; we mean the Ridge Road on the south of Lake Ontario. We have long entertained the opinion, that in the action of ice and icebergs, a cause for the polish of the surface rocks on so large a portion of our country, where that surface is shown, as well as the grooves or striæ which mark them, are to be found more satisfactory than any other which has been assigned. Prof. Hitchcock's geological survey of Massachusetts, both in its scientific and economical aspect, was performed with such ability as to rank him among the first of American Geologists; and the present work will not be likely to lower him in the respect of the learned or the good. Dayton & Saxton, publishers, New York.

Quarterly Journal of Ag.—Edinburgh, Sept. 1841.

THIS Journal holds about the same place in Agriculture, that the Edinburgh Review, and Blackwood's Magazine do in their departments of Literature. The papers are able and varied, and the facts and experiments detailed, numerous, and well calculated to interest and instruct. The first paper in the present issue is a continuation of the Review of Liebig. It is on the whole quite commendatory, though the writer finds it necessary to dissent occasionally from the theories of the learned German. Prof. Johnson's notices of the English Agricultural writers of the 16th and 17th centuries are continued, and the numerous extracts he gives in this number from Mascal, Googe, and Markham, the three writers noticed, are at once curious and instructive. In the midst of directions in Agriculture, founded on correct principles and practice, will be found opinions and recommendations the most revolting to common sense, founded on the superstitions and ignorance of the times. Thus Mascal, in his remarks on the diseases of animals, gives ample directions for determining the "difference between a horse bewitched, and other soreness," and the treatment recommended is enough to make a more patient man than Dean Swift, "thankful that he was not a horse." The work of Googe embraces gardening as well as field husbandry, and his list of garden vegetables embrace most of those cultivated at the present day, with the exception of potatoes which then (1614) were unknown. His directions as to the time of the moon in which seeds are to be sown are very particular, and he decides that the best time of all, is when "the moon is aloft and not set." The following extract from Mascal (1600) will show what absurdities passed current at that time:

"It is most true that in the high mountains of Spain, which lie towards the occident seas, many jennets and young mares have colts without the covering of the horse." This is at least equal to the doctrines of spontaneous generation and transmutation, so common at the present day. Markham, in the "English Huswife," printed in 1615, has a remark, the good sense of which ought to outweigh some of the absurdities of his cotemporaries or his own; for he maintains that "an ignorance of domestic affairs, and culinary matters, should operate as a bar to marriage, because, in fact, in that condition a woman can but half perform her marriage vow, for she may love and obey, but she cannot cherish, serve, and keep him, with that true duty which is ever expected." Dr. Duncan has another paper on the insects injurious to vegetables and animals; and there are many articles of practical utility.

Short and Simple Letter from a Conservative Bee Keeper.

HERE is a little publication of 24 pages, which contains a mass of common sense, practical information on the subject of the bee and its treatment, with which every person who keeps bees should be fully acquainted. The books of Messrs. Weeks and Affleck, valuable as they are, have not rendered this "Letter" useless, as it enters into some practical details, particularly the driving of bees and uniting of swarms, more fully than either of them. We are glad to find the writer contending strenuously against the killing of bees for the sake of their honey, a practice as useless as it is cruel and impolitic. There are a number of engravings illustrating the plans of hives, implements for smoking out or stupefying the bees, plans for ventilation, &c., which render the subjects treated more easy of understanding than they could be without them. We recommend this work to all bee keepers. Boston: Charles P. Bosson, publisher. Price 12½ cents.

Application of Clay to Soils.

IT is well known that the greatest benefit has been derived from the application of clay to sandy lands, it giving a tenacity and capability of retaining moisture which does not naturally belong to such soils. In England the practice of burning clays is much practiced and with excellent effect, although the rationale of its operation has been very differently explained by those who have written on its use. Some have supposed that the greater capacity for moisture was the sole cause; some that it contained salts of potash or animal matter, some attributed it to lime, making it a marl; but it seems to have been reserved for Professor Liebig to give the true solution.

He attributes its value to the power which clay, particularly when burned, possesses of absorbing and retaining ammonia, in the form of a carbonate, for the use of plants. He says, "Gypsum and some varieties of alumina, pipe clay for instance, emit so much ammonia, when moistened with caustic potash, that even after they have been exposed for two days, litmus paper held over them becomes blue. Soils, therefore, which contain oxides of iron and burned clay must absorb ammonia, an action which is favored by their porous condition; they further prevent the escape of ammonia once absorbed, by their chemical properties. The ammonia absorbed by the clay or ferruginous oxides is seperated by every shower of rain and conveyed in solution to the soil."

Is it not possible that the blue or green clay or marl of New-Jersey, and the Atlantic coast generally, which is so very valuable as a fertilizer, owes its power to the ammonia it contains, or is capable of absorbing from the atmosphere? It contains potash, and is or has been evidently rich in animal matter, as the remains in it at the present time prove; and if it should be found to abound in ammonia, or to absorb it readily, its fertilizing power would be fully accounted for, and additional encouragement would be afforded to the preparation and use of such substances. It would be well for all those who have such clays on their lands, or indeed beds of any kind, to test their qualities, and ascertain how far they can be made available, either in the burnt or unburnt state.

Correspondence, Inquiries, &c.

Agricultural Schools.

WE hope the friends of agricultural improvement will not lose sight of the establishment of agricultural schools, as we believe there are few things that would place the farming interest on a surer footing, or more essentially benefit the nation, than such schools. Where it is not convenient to found such institutions, or the funds are not forthcoming, professorships of agriculture might be attached to our colleges or universities, where a series of lectures on the subject should be given annually, as is at present done in the English, and many of the German universities. In this important service such men as Liebig, Daubeny, Johnson, &c. are employed, and the aid they render to the cause of agriculture cannot be easily appreciated. On the subject of agricultural schools we make the following extract from a correspondent in Sumpter county, Alabama:

"Before the farmers can properly see their own interest, their prejudices will have to be uprooted; and it is much to be doubted whether this can be effected until agricultural schools are scattered through the country. Then, and not till then, can the absurd feeling, too common among all classes against improvements be done away, and agriculture elevated to its proper position. That the other trades and professions think it no crime to extort from the ignorance or apathy of the farmers in a few years, fortunes which it would take him a life time to accumulate, though aided by capital and toil, is a fact evident to every observing mind. This state of things calls loudly for reform; it must be corrected. AGRICULTURAL SCHOOLS are the panacea for these and similar evils; let them be unceasingly urged before the public through the advocacy of the agricultural journals; and though the present age may not be greatly affected by them, the time will come when the truth will produce its effect, and the honest laborer go forth to the fields with a robust constitution, and a mind clad in an armor able to resist all the delusions of interested and unprincipled men. Then this earth, which is now a source of dread and profitless toil to him, would be to him a book from which to draw treasures of wealth; and the field, not of stupid, but enticing toil. Every page of nature, as he labored on, would be to him a volume of instruction; and whether in his mental wanderings he traveled upon the earth, in the vegetable kingdom, among the clouds and storms, or among the starry heavens, every thing he met would afford to him themes of pleasure, and new evidence of a beneficent and controling Creator. To the spread of intelligence among farmers we look with interest; and to agricultural schools and agricultural journals the country must look for the desired consummation."

Plum Tree Blight—Inquiry.

MESSRS. EDITORS—In some remarks you made not long since on the subject of the black blight, which is so rapidly destroying our plum trees, you pointed out the months in which the insects that cause the blight are the most active, as the proper time for cutting off the branches, and by burning them, freeing the orchard or fruit garden from their presence. Your remarks seem to have been made on the supposition that the parent insect was active but a short time, that but one crop of eggs was deposited in a season, and of course but one production of grubs took place; and that if the branches infested were cut off at this particular time, the evil would be arrested. I wish to ask whether it is not possible that more than one deposition of eggs takes place, or that the branches are repeatedly punctured at different times during the summer? Is it known what insect it is that produces the mischief? And finally, can you tell us what trees are liable to be attacked?

INQUIRER.

It *was* our opinion, as Inquirer supposes, that the danger of the tree suffering from the attack of the blight insect was limited to a short period, and that like many other depredators, the annual deposit of eggs made, the insect perished, and no successors during the same season were to be apprehended. In that case, if the infested branches were destroyed, the disease would be

eradicated, and the liability to further attack greatly lessened. But further examinations made during the past summer have convinced us that either successive depositions of eggs take place, or that the larvæ remain, in some instances, the entire season in the infected branch. We have found them in the plum tree from June till the last of September. At this late period, in a single infected branch, we found no less than five larvæ or grubs, and where trees were much diseased they were quite numerous. It is plain, therefore, that nothing short of eradicating the excrescences or swellings whenever they appear, or during the entire season can ensure the destruction of the insect. With regard to the insect inself: we believe it is not decided to which of the numerous class of depredating insects this destructive one belongs. As the branches must be punctured for the reception of the ova, it is very probable it is a Sirex, or one of those provided with a borer for that purpose. It is hoped this uncertainty as to the parent insect and its habits will not long exist, and the attention of American entomologists should the more particularly be directed to it, as it does not seem to be known in Europe. The trees liable to attack seem to be thus far exclusively such as when wounded produce gum. This seems to be necessary, both for the food of the larvæ, and for the formation of those excrescences, within which they live while in that state. The plum tree is first attacked, but when these are destroyed, the cherry follows, and we have seen fine plantations of this tree wholly destroyed. All the cherries do not, however, appear equally liable to its attacks, and the same remark may be made of plums. We have a tree of the white magnum bonum, or egg plum, a graft on a white plum stock, and which this season bore a fine crop of fruit. Not a single excrescence has been detected on this tree, though on each side of it, for two or three years past, the common white plum has been loaded with them, and much injured. We have not, until the present season, seen the peach tree injured, but as wounds of this tree produce gum, there was no reason to suppose it would escape. In examining some seedling peach trees, we found one that was transplanted last fall, and very near where a diseased plum tree was standing, was covered with gum which had exuded from its stem and branches, and on scraping this off it was found to proceed from a series of punctured places, evidently produced by the same insect that was destroying the plum tree. Some of the small limbs had the same swellings that characterize infected plum branches, but no excrescences, or discoloration had ensued. It seems certain, then, the same insect will attack the plum, cherry, and peach; the first in preference, but the others when that cannot be found, or has been destroyed. Thorough and prompt excision of all damaged branches holds out, thus far, the only reasonable prospect of saving these valuable trees from destruction, whenever this destructive insect makes its appearance.

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Making Wine.

We are under the necessity of omitting that part of our correspondent's paper that relates to the general principles which regulate fermented liquors, especially as they have been treated by Liebig in his Organic Chemistry in a very full and satisfactory manner, and to which those who wish to investigate the subject will do well to refer. After remarking that all kinds of fruit do not contain the same kind of acidity; that in the grape, gooseberry, mulberry, and a few others, the *tartaric* acid is found; the *malic* in apples, currants, &c., the *citric* in lemons, &c., and that most vegetable productions, whether grains, fruits, or roots, will produce wine of some kind, our correspondent proceeds to the making of wine from currants, that being the fruit most commonly used, next to the grape, for this purpose:

"The following is a receipt for making currant wine, which, as far as my knowledge extends, is that in common use: 'Take any quantity of currants, express the juice, and to every gallon of it add an equal portion of water, (or as some advise a double portion,) and to every gallon of *this mixture* add three and a half pounds of sugar; dissolve the sugar, and put in a cask to ferment; reserve enough to fill up as it works over the bung, and when the fermentation ceases, add one-half pint of brandy to each gallon, and close the cask.' These are the usual directions followed by the makers of currant wine; but they will not produce wine, but in its place we shall have the sweet cordial like beverage I have described in the first part of this paper. Does the error lie in the quantity of the ingredients? By no means; it is in the process. The excess of acid in the fruit requires all the sugar to correct it; and again the combination of the juice and sugar demands as much water as is ordered, to bring the mass to a working mixture. But the quantity of sugar is great and requires a thorough incorporation, by frequent stirring and a lengthened exposure to the atmosphere, to promote fermentation and convert it into wine. This is not the work of a day, nor can the change take place in a close vessel; instead, therefore, of pouring the liquor into a cask or barrel, let it remain in an open tub, or vat, and be well stirred three or four times a day, till the most active part of the fermentation is over, which will take from five to ten days, according to the warmth of the weather, and that of the place in which the operation is conducted. A cool dark cellar is the best; cool that the action may not be unduly accelerated, and dark to avoid the filth of flies and other insects. When the liquor is covered with a clean foam, tinged only by the color of the fruit, and when, on being stirred, it ceases to make much hissing, and when the taste of the liquor has changed from its original fruity flavor to that of wine, pour it into the cask which should be filled, and a surplus retained to replenish the vessel as it works over in the further process of fermentation, and the formation of gases. When again the vessel remains full, and no longer gives forth any sign of fermentation, drive home the bung, still, however, leaving the small hole slightly closed with a peg, to give vent to such air as may continue to be generated for some days longer, when the cask may be completely stoppered and the wine left to itself. In the ensuing spring it should be drawn carefully from the lees into another cask for use; but no brandy should be added, as wine made in this way will keep any length of time in a good tight cask. If your readers will do me the favor to conduct their vinous operations according to these directions, they may rely on being well pleased with the result. They will each year have an article similar in body and flavor, and as different from the produce in the old way as can be imagined. I have been a laborer in this vineyard for many years with uniform success.

THE SCHOOLMASTER ABROAD."

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Growth of Trees.

D. G. WEEMS of A. A. county, Maryland, has furnished us with the following experiment made by him on the annual growth of trees:

"Some three years since, I took the circumference of some 200 trees, mostly black oaks, and marked upon them their size in inches. The soil on which they stood was a light colored stiff clay, about fifteen feet above tide water. Although I shall not attempt to reduce my experiments to a scientific form, but merely state facts, and leave the result to the reader, I hope they will aid some more competent person in a full investigation of the matter. The measurement, increase, &c. of twenty trees here given, will represent the grove fairly, and three years should test the experiment sufficiently.

Kind of Tree.	*Measure in Inches.*	*Annual Increase.*
1 black oak,	160*	2
1 "	123	1-2
1 "	89*	1 3-4
1 "	67	1 1-2
1 "	66	1
1 "	63	1-2
1 "	84	1
1 "	49	1-2
1 "	49	1
1 "	35	0
1 "	30	1-2
1 white oak,	143	0
1 "	49	1-2
1 "	44	1
1 gum,	76	1-2
1 "	21	1
1 black walnut,	55	1 3 4
1 wild cherry,	55	3-4
1 red cedar,	22	1-2

"It will be seen that the annual average growth of these twenty trees is less than one inch, or 17-20ths of an inch. I next measured six trees that were fallen in the same wood, ascertained their circumference in inches, and their age by the rings or circles in the tree, thereby finding the probable age of those standing, their yearly growth, and the capability of the soil to grow timber. The results on these six trees were as follows:

1 oak,	74 inches circumference,	counted	57	circles.
1 "	72 "	"	57	"
1 "	67 "	"	53	"
1 "	64 "	"	66	"
1 "	54 "	"	56	"
1 "	51 "	"	46	"

"The average annual growth of these trees appears to be one inch and one-sixth of an inch. I then found by examination that these trees had acquired in their central part one-half of their whole diameter, in one-third of their whole number of years, thus proving that trees, when young, growing in a wood, make their annular circles of greater thickness than they do after they have towered high. I then measured two trees standing on the south side of this grove: one black oak 102 inches and 60 circles; one do. 80 inches and 55 circles. In these trees the circles averaged about the same number to the foot, from the heart to the bark, in every portion of the stump; thus showing the advantages of sun and air to vegetation. I now measured two isolated trees standing on a higher soil, but still on clay: one oak 120 inches, 86 circles; one do. 108 inches, 43 circles, averaging nearly two inches a year; and the same results were obtained in the measure of some fruit and forest trees planted out some ten years since: thus proving that trees flourish better and are more thrifty when not crowded, and the roots and branches have room to spread."

We shall be glad to receive the promised article on the culture of tobacco.

* These trees grew on the margin of the wood.

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Sagacity of the Dog.

A correspondent at Cuddebackville, gives the following instance of the sagacity and attachment of the dog, which occurred a few years since in Delaware county, N. Y.:

"A boy in sliding down hill was carried into the river, and conveyed by the current some distance below into a deep eddy. The eddy was frozen over with a thick body of ice. A number of neighbors collected and searched several days for the body, until, I think, the third day; being about to give up the search, one of them (Gen. Gregory) observed that a dog belonging to the same family with the boy had been almost constantly on the ice, and was always seen to lie down in a particular spot, and suggested it might be best to cut an opening in that place. It was done, and in a depth of four feet of water the body was found. Now, when we consider the depth of the water, and the thickness and nature of the ice, (18 inches and very opaque,) the question naturally presents itself, by what sense did the dog discover the body of the child? It would be difficult to believe that any odor emanating from the body in that situation, could pass directly upwards through a current of four feet of water and eighteen inches of ice. The opacity of the latter would forbid the idea that it could have been discovered through the ice; and I can only conceive that the knowledge was derived from some sense in these animals of which we have little conception. H. V. K."

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The Agricultural Art.

We have received from the author, ARTHUR ST. JOHN, an essay with the above title, from which we make the following extract, which is all our limits will permit:

"The pursuit of improvement is not visionary or trivial, but has been sanctioned by the voice of time. It is far from being a speculation or a dream. The art of agriculture, well named the 'parent art,' is coeval with human civilization. So long as men roamed hither and yonder—living in tents and removing wherever some green spot induced a stay, and had no fixed habitation, they were barbarians: but when they chose a place for a dwelling, and scattered a few grains of wheat for the purpose of harvesting, and procuring means of subsistence, they had made a step in the march of civilization. The oldest and the best Book assures us that the three first men were a gardener, a plowman, and a grazier; if it be sneeringly objected that the second was a murderer, let the reply be, that when he became such, he turned a builder. The art of agriculture will survive all sneering. It has received the commendation of the past, and as a celebrated writer has wittily remarked, 'if heraldry were guided by reason, a plow in a field arable would be the most noble and ancient arms.' It is an art which can exist with the exclusion of all others. It has been compared to speech, without which society would be a dismal chaotic jumble; the other arts are the mere figures and tropes, in fact, only ornaments."

—

Bloody Murrain.

THE following is in reply to an inquiry respecting this disease among cattle, its nature and cure, at page 143 of the Cultivator, by WM. F. WRIGHT. The writer thinks his experience in the treatment of diseased animals in Europe and in this country, enables him to speak on the subject with confidence. We do not vouch for the correctness of his theory or practice:

"The bloody murrain is no other disease than what is called in Europe, and in Pennsylvania, the *red water*; but before any animal will die of this, it must have been ill for some weeks, perhaps two months with the same. The cure is this: Take one quart of blood from the animal by bleeding. Give it every four hours one ounce of salt petre in water. The feed for the beast must be young grass or cabbage leaves. If there is no passage, you must give every two hours a clyster made as follows,—three handsful of oats boiled in water, three drams of salt petre, and one and a half ounces of linseed oil, mixed when milkwarm and used. If no better on the third day, take again one quart of blood. When the movement of the bowels is difficult, and the dung is mixed with blood, it has assumed the form which we call the *black blood*, but which is nothing more than the red water in its latest and most aggravated form, generally ending in death. The salt marsh where Mr. Wright's cows have grazed is the very place to get this disease, and as proof of this, I refer to the experiments which thousands have made, (and which every one may make,) showing that cattle from a high, dry country never suffer from this complaint. If Mr. Wright will keep his cows from this marsh, and not feed them with hay made in such places, I will warrant his cows safe from this disease.

St. Lewis co. Mo. CHARLES HOFFMAN."

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AMONG those who contributed largely to the success of lthe late Fair of the State Agricultural Society at Syracuse, as well as that of the American Institute at New-York, none rendered more efficient aid than our friend and correspondent ALEX. WALSH, Esq. of Lansingburgh, whose numerous contributions to the public press, mostly under the signature of "A. of the North," aided essentially in exciting that spirit which drew such multitudes and gave such eclat to those Fairs. As the premiums for Butter, Cheese, and Field Crops, (for which see last number of the Cultivator) are not to be awarded till the annual meeting, to be held in this city on the 18th January next, we publish the following for the purpose of calling particular attention to those premiums, for which we trust there will be a spirited competition.

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Washington and Rensselaer County Butter.

The efforts that have hitherto been made for the improvement of the different branches of agricultural industry, it is to be feared, have not been extended to the manufacture of butter. The whole civilized and demi-barbarous portion of the globe have been ransacked to procure the best breeds of horses, cattle, sheep and hogs; art and ingenuity have been nearly exhaust-

ed in bringing out the best plows, and other farming utensils; the finest growing regions of the earth have been explored to procure the best grapes and plants, all of which have contributed largely to the improvement of the several departments of agricultural labor. But the manufacture of butter, an article that enters so directly into the composition of a good breakfast, is permitted to drag along the old fashioned way, with hardly an attempt at improvement. This is rendered somewhat inexplicable, when we reflect how simple the rules are for making perfect butter. It is in fact

"A liberal art that costs no pains
Of study, industry or brains."

The cream should be kept in a dry, cool place where no bad air nor bad odor is permitted to enter. After the process of churning, *all* the milk and superfluous matter should be pressed out; then, with half the usual quantity of salt applied, pack it down *solid* in heart-ash tubs or firkins for commercial uses, or stone jars for more immediate uses. A British critic has remarked "that it was his belief that if a premium of a thousand dollars was offered for the best translation of the Greek Bible, it would be taken by a Yankee, who, till the offer was made, had never seen a word of Greek in his life; that he would commence learning the language immediately, to qualify himself for the undertaking, and would finish the whole work quicker than any other person, and bear off the premium." We take the spirit of the above to be true, as applying to our national character; and we hold it to be true, that the art of manufacturing good butter is as easily acquired, as that of translating Greek; and as there is no premium offered for the latter performance, it behoves the fair wives and daughters of Washington and Rensselaer to secrue the premiums offered for the former.

We are gratified to learn that the State Agricultural Society has determined to reward the butter makers if the result of their labors should merit it, and we entreat all those who engage in that pursuit in these counties, to strive for supremacy in that art. If they but make the effort, we feel assured they will succeed. There is no lack of verdant pastures in these counties, and none of stock, and shall we say there is a lack of *enterprise?* Never! It wants but the proper attention towards that pursuit. If there were no other inducement, certainty of better prices for a good article, is sufficient to excite a little extra effort in the manufacture of the article. Let it be no longer said that Orange and Dutchess bear away the palm in quality and prices. They possess nothing in soil or climate, in stock nor enterprise, that is not possesed in Washington and Rensselaer.

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Reasons for engaging in the Silk Culture.

We give another paper, from the same source, setting forth eighteen reasons why the people of the United States, especially the farmers, should engage in the business of silk growing:

1. Because silk forms the heaviest item in the catalogue of our importations.

2. Because we possess the means of doing it to better advantage than any other nation.

3. Because the necessary skill is easily acquired, and no nation ever possessed better talents to acquire it.

4. Because the nation is under heavy embarrassments on account of excessive importations, and no other means are so sure of success in providing the necessary relief.

5. Because it can be effectually engaged in by all classes of people, requiring little or no capital.

6. Because we have more spare land than any other nation, and much well suited to the growth of the mulberry, which is worn out for other purposes.

7. Because we are already well stocked with the mulberry trees, which will be lost to the nation if not used for that purpose.

8. Because a stock of silk worms may be obtained the first year, equal to what could be reared of any other live stock in a great portion of a lifetime.

9. Because raw silk or cocoons are always surer of sale than almost any other commodity.

10. Because it is a very certain crop.

11. Because a pound of silk worth six dollars can be grown in less time than a pound of wool worth 50 cts.

12. Because it will cost no more to transport a pound of silk to market worth six dollars, than a pound of bread-stuff or pork worth six or eight cents.

13. Because the labor of growing a crop of silk requires only six or seven weeks, while that of almost any farming crop requires more than as many months.

14. Because most of the labor will be performed by women, children or invalids—who, though willing, are unable to perform other profitable labor.

15. Because there are hundreds if not thousands of skillful silk manufacturers in the country who are unable to find regular employment for want of raw silk.

16. Because the growing and manufacture of silk has never failed to be a source of wealth to any nation which embarked in it.

17. Because the Legislature of our State, having observed and duly weighed all the foregoing reasons, have wisely offered a liberal bounty for its encouragement.

18. Because the American Institute with a liberality which speaks volumes to its everlasting credit, has offered, for the encouragement of literature as well as this most eminent branch of industry, a premium of fifty dollars and a gold medal for the best treatise thereon, and a like medal for the best silk reel.

The person who would not be stimulated to exertion by such reasons and liberal offers of reward must be sordid indeed. A. OF THE NORTH.

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Inquiry—Ayrshire Cows.

Messrs. Editors—I have paid some attention to the subject of improvement of cattle; as shown in the discussions which have been carried on in your journal, and some of the papers of the country, and I had supposed that the Ayrshire cows, so celebrated for their milking qualities, were like the Short Horns and Devons, a distinct race; and it was with some surprise I noticed the following sentence in Mr. Allen's last letter in your paper:—"*Ayrshires we can make here by the thousand, by crossing Durham bulls on our best native cows.*" You would oblige me, and perhaps others, by stating whether this opinion of Mr. Allen's is sustained by the best English authorities on cattle. A NOVICE."

The best authorities on the origin of the English breeds of cattle are Low and Youatt. On this subject the first has the following remarks—"This breed, deriving its name from Ayrshire, extends to the adjoining counties Lanark, Dumfries, Renfrew, Dumbarton and elsewhere. It manifests certain points of resemblance to varieties of the Short Horn breed; but all its essential characters of form connect it with the Alderney. The resemblance is so great that a Jersey cow might sometimes be mistaken for an Ayrshire one. The cows of the district of Dunlop, are said to have been the first celebrated for yielding milk; and tradition asserts that the cows of that district were crossed by Alderney bulls. This then may be inferred to be the true origin of the dairy breed of Ayrshire; but it is probable that males of the Holderness, or other Short Horn varieties have also been introduced, and given certain characters to the native stock, though at what time such intermixtures took place, or how far they affected the character of the existing stock, is unknown."

Mr. Youatt says, "These cattle, from which, by crosses with the native breed, the present improved Ayrshires arose, were first introduced on Lord Marchmont's estates in Berwickshire;" and he quotes Mr. Robertson in his *Rural Recollections*, as saying, "from what particular part of the country they came, there appears no evidence. My own conjecture is, that they are either of the Holderness breed, or derived from it; judging from the varied color, or, from somewhat better evidence, the small head, and slender neck, in which they bear a striking resemblance to them."

Rawlin, in his "Complete Cow-doctor," of 1794, says,—"They have another breed called the Dunlop cows, which are allowed to be the best race for yielding milk in great Britain or Ireland, not only for large quantities, but also for richness of quality. It is said to be a mixture, by bulls from the Island of Alderney, with their own cows."

Mr. Youatt says,—"It requires but one moment's inspection of the animals, to convince us that this supposition [the origin from the Alderney cross] is altogether erroneous."

It will thus be seen that Low and Rawlin derive their origin from the Alderney cross: Robertson from the Holderness: and Youatt inclines to the last supposition. It may be naturally inferred that the question of their origin is a matter of obscurity; and as the Holderness is the name of one of the unimproved varieties of the Short Horns, (although according to Youatt one of the worst,) it is not impossible, if we admit this remote Short Horn origin of the Ayrshires, that Mr. Allen's method of producing them would not succeed admirably. On the contrary, if the Ayrshires have an Alderney origin, Mr. Allen's cross would fail. Perhaps, however, Mr. Allen did not intend to assert that the cross proposed by him would give positive Ayrshires, but only a breed possessing all their essential and most valuable qualities. We have ourselves little doubt, since the evidence meets us at every turn wherever the Improved Short Horns have been introduced, that the cross proposed by Mr. Allen of Short Horn bulls, with the best native cows, would give a breed possessing in a great degree the qualities of good milkers, hardihood in keeping, and aptitude to fatten, although it might be improper to term them Ayrshires.

Wheat Statistics.

The Rochester Evening Post, a paper that may be pronounced one of the best authorities in the western part of the State, in matters relating to the products, &c. of that section, in some late remarks on the falling off of the wheat crop of 1841, makes the following statement:

"The Rochester and Batavia railroad transported to Rochester in 1840, up to Nov. 1st, no less than 378,000 bushels of wheat; up to the same date in 1841, only 78,000; leaving the serious deficit this year of 300,000 bushels. By the same road there was received at Rochester, in 1840, 32,800 barrels of flour, which at five bushels to the barrel amounts to 164,000 bushels of wheat; the present year only 14,0 0 barrels, equal to 70,000 bushels of wheat; showing a deficit of flour equal to 94,000 bushels of wheat; which added to the deficit of wheat first mentioned, shows an aggregate deficit equal to 394,000 bushels of wheat from that quarter alone!"

This is a most extraordinary falling off (even admitting, as is probable, that more of the Genesee and Livingston wheat and flour found its way to the Genesee Valley Canal than it did last year,) in the marketing of a single product on a road of only thirty miles in length; and we agree with the editor of the E. P. that the deficit of wheat marketed in this case, may be considered only a sample of the falling off in the wheat sold in Western New-York generally.

Crushed Bones—Mode of Action.

The cause of the fertilizing effects of crushed bones or bone dust, does not seem to be satisfactorily ascertained, and while in practice all agree as to their efficacy, the "why and wherefore" is still a matter of uncertainty. Johnston in his agricultural lectures gives the following as the constituents of bones and the relative proportion:

"Dry bones contain about two-thirds of their weight of earthy matter, the other third consisting chiefly of animal matter, resembling glue. Of the earthy matter, five-sixths consist of phosphates of lime and magnesia; and the rest chiefly carbonate of lime. Thus a ton of bone dust will contain—

Animal matter, or gelatine,	746 lbs.
Phosphate of lime,	1,245 "
Carbonate of lime,	249 "
	2,240 lbs.

Sprengel, a German writer and chemist of the highest authority, maintains that the phosphates are the principal fertilizing ingredients in bones, and in this opinion Chaptal in the main concurs. To this fact Sprengel attributes their not being as efficient in the north of Germany, as in Britain, the soil of the former country containing naturally a greater supply of the phosphates than the latter. Mr. Johnston, however, without positively deciding that the efficiency is owing to the animal matter, gives the following facts derived from practice, as in accordance with that opinion:

"1. In the Doncaster Report, bone dust is said to be most efficacious on calcareous soils,—for in the presence of lime, all organic matter more rapidly decomposes.

"2. That horn shavings are a more powerful manure than bones,—since horn contains only one or two per cent of earthy matter, (the remainder being animal matter or gelatine.)

"3. That before the introduction of crushed bones, the ashes of burned bones had been long employed to a small extent in agriculture, but have since fallen almost entirely into disuse.

"4. That old sheep skins cut up and laid in turnep drills have been found to raise as good a crop of roots, and after crop of corn, as the remainder of the field that was manured with bones

"5. That according to Liebig, "40 lbs. of bone dust are sufficient to supply three crops of wheat, clover, potatoes, turneps, &c. with phosphates," while a ton and a half of bones, containing from 1200 to 1800 lbs. of phosphates is the quantity usually applied to an acre."

Bone dust or crushed bones has not been used to any considerable extent hitherto in the United States, but their use as a fertilizer is on the increase, and the great quantities that might be provided of this manure should it prove as valuable here as abroad, renders it desirable that those who have experimented with it should lay the results before the public. If the piles of bones that accumulate in cities until they become nuisances, can be converted by the simple process of crushing into the most powerful of fertilizers, it is proper that the attention of farmers should be directed to their saving, preparation, and use.

Large Vegetables.

Mammoth vegetables may, in general, be considered rather the result of accident than otherwise, and such is the light in which they have hitherto been viewed. When, however, as in the last and present year, they are common, it is not unreasonable to attribute them to improved varieties, and more care and skill in cultivation. To show what has been done this year, we make a few extracts from papers now before us:

"Mr. Joel Townsend of Lorrain county, had in exhibition yesterday a Persian squash that weighed 165 pounds, and measured six feet and nine inches in circumference."—*Cleveland Mercury.*

"The largest sweet potato we have seen this season was presented to us on Wednesday last, by Mr. R. C. Hincoe—it weighs four and a half pounds, is twelve and a half inches in circumference, and eleven and a half inches in length."—*Kentucky Gazette.*

"On the farm of the Rev. J. Van Tassel, in Maumee, Ohio, a watermelon vine, sprung from a single seed during the past summer, bore twenty-eight melons that averaged eighteen lbs. each. Five hundred and four pounds of melons from a single seed. Fact and no mistake."—*Bost. Cour.*

"We received a present of peaches a few days since from the farm of W. H. Davis, Esq. one of which measured ten and a half inches in circumference, and three and a half inches from the stem through, with the peeling off. They are preserved in brandy, and we hope to enjoy them at our leisure on some future day."—*Elizabeth City (N. C.) Star.*

"Mr. D. White of Perquimans county, gathered this season from his patch ten watermelons which weighed respectively 26 1-4, 26 1-2, 27 1-4, 27 1-2, 28 1-4, 29 1-2, 30, 32, 33, and 37 1-2 pounds—making an aggregate of 297 1-2 pounds. The largest measured three feet one and a half inches."—*Elizabeth City (N. C.) Star.*

We have noticed also many instances in the papers of the day of beets, squashes, &c. The squashes have ranged from 100 pounds to 207 pounds, which we think is the largest.

We also take pleasure in this place in acknowledging the receipt from Mr. L. Hotchkiss of Amber, Onondaga county, of a splendid beet, measuring 15¾ inches in length, 23½ inches in circumference, and weighing 14 pounds closely trimmed. It is a very smooth handsome root for one of such great size.

The reports of the various agricultural societies prove most conclusively, that the past season has been most propitious for all plants and crops not liable to be injured by drouth; and in many districts the want of water has not been felt at all. The high temperature has been most favorable to all plants of the squash and melon tribes, and to fruit in general, but the potato and ruta baga have suffered from it.

Profits of Farming.

We believe there are many farmers who take an incorrect view of the business of farming as far as its profits are concerned. They seem to suppose that what is sold from the farm, is alone to be accounted as profit, while no note is taken of what goes to the support of the family, or is invested in improvements on the farm. To give an instance, we will refer to a conversation had with a farmer a few days since, a man worth some six or eight thousand dollars, industrious and thriving; but who complained that he was only able to raise in cash from his farm only some three or four hundred dollars annually. As a contrast he mentioned a friend of his who had about the same amount in funds that he himself had in real estate, and he seemed to consider the interest his friend received as a clear profit on his capital, and that money so invested gave more income than a farm would. We knew our farmer had a large family, and suspecting he had overlooked the cost of providing for them in his estimate of what he received from his farm, inquired how much he thought he should have left in cash after maintaining such a family as his from the sum his friend received as interest? He hesitated a moment and answered, not any thing; his receipts would barely foot the bill of my family expenses for one year; in truth he has little or nothing left, after supporting his own.

So we doubt not it often is with the farmer. That which he and his family eat, drink, and wear, that which goes to make them comfortable and respectable, because it is the product of the farm, the gift of a kind Providence, and the result of their own toil, is frequently overlooked by him in his estimate of the profit and loss of farming, and nothing is counted but the cash which remains after all expenses and outgoes are provided for. This is not treating the farm fairly. In one case the farm is capital, in the other the capital is in the funds. That which goes to the support of the family is as much the product of capital in one case as the other, and in both cases should be considered as the profit; and if the farmer, after the maintenance of his family, and defraying the expenses of labor, improving his farm, &c. has some three or four hundred dollars left to purchase more land, and dispose of as he pleases, while his friend the fundholder has little or nothing left, it surely cannot be reasonably inferred that the farmer's profits are least. Aye, but the farmer has to work for his profits, while the other lives at his ease. True, and here we suspect lies the great difficulty, and it is an evil that should be corrected at once. The objection implies that it is disgraceful, unhealthy, or unprofitable to labor, suppositions entirely erroneous. It cannot be disgraceful to labor in a country where every man is the architect of his own fortune, and makes or mars his condition for life; it is not unhealthy, as the experience of the whole world proves; and as to profit, where can be found a class of men more prosperous, and accumulating wealth faster than American farmers? Before the farmer concludes there is no profit in farming, let him look at the whole ground, and we think a different conclusion will be reached!

The Silk Business for 1841.

The past season seems to have been very auspicious to silk growers, the worms having in general been far more healthy than in 1840, and the consequent loss and discouragement from that source obviated. In some instances, from want of sufficient ventilation, or proper food, partial losses have been occasioned, but in some instances the prompt use of lime as recommended by the French, and communicated by Mr. Smith to the American public, has checked the diseases thus produced, and saved the crop. Many too have hatched more worms than the foliage on hand could supply, and the worms partly starved, made poor and imperfect cocoons. But all these difficulties will be overcome by experience, and every thing now indicates the success of this new and important branch of native production and manufacture. To the middle and southern States, particularly, the silk business will form an important source of wealth, as the mulberry grows there with less care and attention than farther north; but the experience of the past season as well as that of former years, proves that the mulberry may be grown and silk made to great advantage as far north as the 43d degree of latitude. Time only seems to be wanting to make the silk crop, like that of wheat or corn, a part of every man's farming operations; and we think it may be relied on that if the silk culture ever becomes an important item in our domestic products it will be the result of individual energy and effort, and not be in any degree owing to the action of the great Silk Societies that have promised so much and performed so little.

To show what has been done, we make a few extracts from papers now before us, and it will be seen that they are of the most encouraging nature:

Mr. Campbell of Williamson Co., Tenn., writes to the Editor of the Agriculturist—"After giving away enough of my silk worms, about the third moulting, to make, as I suppose, about fifteen bushels of cocoons, I have gathered 34 bushels of cocoons out of the two houses you saw me feeding in. I counted half a bushel, and there were 2,900 in it, requiring 5,800 to the bushel. My worms were healthy throughout, but from their crowded situation, many of them were small, and consequently made imperfect cocoons. I am of the opinion I would have made more silk with half the number of worms."

Mr. Morris of Burlington, N. J., the patentee of the improved silk frames, has fed a great number of worms the past season and with the best success, which he attributes in a great measure to the use of his frames for feeding, an opinion strengthened by the favorable opinion of others who have used them. His first crop gave about 50 bushels of cocoons, and he says in the Silk Record, a valuable work which he publishes, "one bushel of peanuts has been reeled, and afforded the unfailing average product of good peanut cocoons, 20 ounces of fine silk."

Dr. T. White, a gentleman thoroughly acquainted with the silk culture in the country, in a letter dated at Washington, says—"The silk feeders this year are every where successful. In Kentucky, Indiana, and Ohio, there will be several thousand bushels of cocoons raised this season. There is abundantly more silk made this year than all the workmen in the United States can make up."

The following extract of a letter to the Agriculturist, from Mr. Fox, who superintends one of the most successful silk factories in the West, that of Mt. Pleasant, Ohio, thus describes the operations at that place; "We have weighed off 300 lbs., and have hatched out 600,000, and have no doubt by the time we have done feeding, we shall not fall short of one million. In the year 1839, I never got more than 14 ounces to the bushel; in 1840, I got 15 ounces, and this year can average 19 ounces of fine reeled silk to the bushel from the white and gray mammoth; the peanut I expect from 20 to 21 ounces. Hitherto our reelers could not average more than 8 ounces a day, ten hours; this season they are reeling from 15 to 17 ounces, six or eight fibres to the thread."

We might multiply such extracts, but these, with what we hear and see of the progress of the silk culture among us at the North, will show that the production has taken a deep, and we trust a firm hold in the country. If it succeeds, we shall no longer see half a million of specie shipped monthly to pay a foreign nation for silk, because that nation refuses to exchange it for any of the productions of our soil, or our manufactures. Markets for cocoons, and manufactories for the use of the raw material, will doubtless spring up, as the supply and demand increases. The purchase of the cocoons, and the preparation of the raw material at our State Prisons, will, we think, open a source of employment for many of the convicts, not liable to the objections so strongly and justly urged against the manner in which they are now occupied; and at the same time furnish a convenient market for the silk crop of a large portion of this State.

State of the Laboring Classes in Europe.

It seems to be an indisputable fact, however difficult it may be to account for it, that the condition of a large part of the poorer and laboring classes in all the principal countries of Europe is becoming more and more deplorable. This is particularly the case in large cities and manufacturing towns, and while these overgrown cities are adding to their wealth, and expending immense sums on fountains, squares, and articles of luxury, the poorer classes are gradually starving. When we remember that the capital of the working classes lies in the vigor of their muscles, the gradual decrease in the consumption of meat and substantial food among these classes of laborers and manufacturers, must be looked upon as a sure proof of the facts above stated. The *Journal des Debats* has published some papers illustrating this subject, from which the following is extracted, relating more particularly to Paris, but more or less applicable to all the cities of Europe:

"From 1819 to 1829, the annual consumption of Paris was 76,000 oxen of 360 killogrammes each; from 1829 to 1839, it was not 70,000 oxen of 325 killogrammes, though the population had increased one sixth. In 1825, 830,000 inhabitants of Paris consumed 46 1-2 millions of killogrammes of butcher's meat. In 1833, 920,000 consumed only 44 3-4 millions of killogrammes. In 1789, Lavoiser estimated that the Parisians consumed 75 killogrammes per head in the year; now they consume 48 1-2. The consumption of wine, the other great source of strength to the working population, is also greatly diminished. It is not one half of what it was in 1809."

When, in addition to such statements as these, we take into consideration the facts, that no inconsiderable portion of the manufacturing population of Great Britain are at the present moment on the verge of actual starvation; that the continued increase in the prices of food in general and meat in particular, is daily rendering their acquisition by the poor more and more impossible; and that notwithstanding the prodigious advances made in agriculture and the vastly increased production of Britain and Europe, food for the mass is becoming more scarce, the conclusion is unavoidable that the mistaken regulations of man have interfered with that beautiful ordinance of Providence, which provides for every one who is willing to till and cultivate the soil. It is idle and incorrect to say, that in these places where this acknowledged distress exists, the population are overrunning the means of subsistence, as the means of subsistence are ample, and within their reach as it were, but they are forbidden to reach out the hand to partake. There must be something fundamentally wrong, where labor will not furnish bread, and where, while the few are rioting in abundance, the many are in want of the commonest means of subsistence. For the idle, or the spendthrift, we have little sympathy; they are transgressors of the original law which requires labor, exertion of some sort, to earn our daily bread, but whenever the situation of any country becomes such that the laborer, the real producer starves it is clear a state of things exist, in which patient suffering ceases to be a virtue, and passive obedience to power becomes a crime.

Guano, the Peruvian Manure.

The rocky coast and islets that exist in the desert district between Peru and Chili, are the great resort of millions of sea birds, gulls, &c. and their manure which has been accumulating for ages now forms masses of great thickness, and which is constantly increasing. As these birds feed principally on fish, and other marine matters, the *guano*, as the manure of these deposits is called, contains large qantities of phosphates of lime, ammonia, and other products of animal matter, and as it rarely rains on this coast, the masses have not undergone the bleaching or draining they would have done in other places. Thus constituted, this substance is one of the most active of manures; and has for a long time been used by the Peruvians in the culture of corn. A writer in a foreign journal says in passing on horseback along the coast he frequently saw the natives driving an ass or two into the interior, with a package of this guano on each side, and when asked how they used it they said they put a *pinch* of it in each hill of corn at the time of planting. A number of ship loads of this native *poudrette* have been carried to England where it commands a high price as a fertilizer, and present indications denote that the importation of the article will hereafter be extensive. The English farmer understands his true interests, when he extends his expenses for manures. From the United States he collects ashes, bones, &c. from the Meditterranean crude nitre, soda, &c. and now he has opened the mines of Guano, on the shores of the far Pacific, all of which are used for fertilizing the soil, while the same substancese, not less needed where procured, are mostly neglected.

Canker Worm and the Elm Tree.

We find in the Northampton Democrat, an interesting letter on the subject of the elm and the canker worm, from Dr. A. S. Munson of New Haven, in answer to one addressed by Thomas Ritchie, Esq. of Richmond, Va., to T. Shepherd, Esq. of Northampton, making some inquiries as to the elm in the New England cities and villages, and the best means of preventing the canker worm or destroying it, as this pest of the elm and the apple has appeared as far south as Virginia, according to Mr. Ritche.

Mr. Ritchie calls his elms the Dutch Elm, but Dr. Munson shows they are the *Ulmus Americanus* or American elm, and not the Dutch or English elm, very few of these trees having yet been introduced into this country. Dr. Munson states, we believe correctly, "that the American elm common in our cities and villages, the *fulva* or slippery elm; the *alata* or cork-bark elm; the *racemosa* and *nemoralis*, are the only known American species." The common American or white elm, varies much in appearance according to soil, exposure, &c., which has caused some observers to suppose they were different species. Dr. M. states that the celebrated Pittsfield elm is the *Ulmus nemoralis* or river elm, and we have seen most magnificent specimens of this tree growing in the forests of central New York.

As a preventive of the worm, Dr. Munson is decidedly in favor of the lead circular troughs, since the period of the attack of the canker worm is so extended, that ordinary precautions are of little use, and permanent safeguards become necessary to prevent the ascent of the female moth for the purpose of depositing its eggs on the tree. Fortunately for the grower of trees, while the male moth has wings, the female has none, but is obliged to crawl up the tree, and any thing that intercepts her progress saves the tree from defoliation. Dr. M. states that he has known plowing in August, after the larva had left the tree for the earth, prevent the attack of the worm, the larva being most probably arrested by the operation while in the pupa state. It seems indeed probable from the known effects of late plowing on other insects, that an exposure in this way would destroy many of them. Dr. M. states a fact new to us, that the slippery elm is never attacked by the canker worm; but the Dr. adds—"the only objection to it as a shade tree, is its liability to be deprived of its bark by boys who are very fond of chewing it. I have engrafted it into the common elm that it might thus escape their notice." So it is in this country, we save nothing, and destroy every thing. Boys that will destroy an ornamental tree for the sake of chewing the bark, should be made to chew a cud peeled from the raw hide of the *Bos Americana*. We whittle down our fences and school houses; we whittle down our halls of justice and our churches; and in default of other things, we whittle down our ornamental trees. We have no patience with such vandalism.

To prevent Weevil in Wheat.—The heat of the sun is the best remedy against the weevil in wheat. If the grain remains out several weeks after cutting, in small shocks, it is not likely weevils will trouble it after it is thrashed and put up. If the grain be sunned two or three times in the summer, and exposed to the cold as often in winter, it is not likely to be troubled by this pestiferous insect.—*Tenn. Agriculturist.*

Premium Crops.

The Washington Co. Ag. Society, awarded premiums as follows, at its late Fair in Salem:

To Job Eldridge of Easton, on corn, $6.00. 179 bush. of ears, common eight rowed, per acre, raised on greensward broken up in April, without manure, seed rolled in plaster.

To Amos A. Egleston of Greenwich, on corn, $4. 125¼ bushels Dutton, per acre, on greensward, with 20 loads barn yard manure before breaking up, and plastered once after the corn was up. Value of the crop after deducting expenses of cultivating, $31.61 per acre.

To Amos A. Egleston, on oats, $4, 48¼ bushels per acre, English, weighing over 40 lbs. per bushel; soil sandy loam, in corn last year, and 20 loads of manure then applied, none since; sowed 3 bushels per acre. Nett profit $23.05.

To Peleg Sherman, of Greenwich, on potatoes, $5. 606¼ bushels per acre,* by estimation, French pink eyes and Leopards; raised on land manured and in grass last year, oats the year previous; seed sliced, one eye on a piece, two pieces in a hill, with plaster.

To Phineas B. Whelden of Greenwhich, on peas, $4, 30 bushels per acre; soil slate and loam, in corn last year, stalks stacked and foddered on the land.

To John A. McNeil of Greenwich, on winter wheat $6, 23 bushels per acre, on pasture land, broken up in July; harrowed, replowed, and sown in September; 1¼ bushels seed per acre; 1 bushel plaster in June, and the same in September.

To Alexander Cherry of Greenwich, on winter wheat $4, 21¼ bushels per acre, weighing 64 lbs. per bushel; on newly cleared gravelly land; ¼ bushel of lime per acre before sowing; subsequently 1 bushel plaster, and a like quantity in the spring.

To Calvin Skinner of Cambridge, on flax, $4, 300 lbs. of lint and 12 bushels of seed per acre. Nett profit $32.

The Wayne Co. Ag. Society awarded its first premium of $5, to Samuel Hecox, it being for 80¼ bushels of yellow shelled corn to an acre.

Second premium of $3, to Daniel Kenyon, for 82 bushels white shelled corn per acre.

First premium of $5, to Daniel Kenyon, for half an acre of potatoes, yield 109¼ bushels.

Second premium of $3, for half an acre of potatoes, yield 102¼ bushels.

The Oneida Co. Ag. Society awarded premiums on field crops as follows:

To Elisha Pettibone of Vernon, best acre of winter wheat, 37¼ bushels, samples exhibited of the very best quality, $15. Julius Curtiss, Westmoreland, best acre of corn 84 bushels, 36 lbs. $15—the corn was excellent from sample. Elisha Shaw, Rome, 2d best acre corn, 83 bushels, 16 lbs. very good corn, $8; Nathaniel S. Wright, Vernon, best acre of oats, 61 bushels 3 pecks, $15; Jay Pettibone, Vernon, best acre of barley, 50 bushels 5 lbs. $10. Benj. P. Johnson, Rome, best half acre potatoes, (Silver Lake) quality and quantity considered, 106 bushels, $10. James Phinney, Vernon, best half acre, quantity alone, 192 bushels, $10.

To Lyman Stoddard, Westmoreland, 2d best half acre, as to quantity, 178 bushels, $5.

To Benj. P. Johnson, Rome, best half acre ruta baga, 213 bushels, $10.

The officers regretted that they were obliged to exclude the crops of corn of Stephen Scott of Lee, which yielded 97 bushels and 40 lbs. to the acre, and the crops of oats of Elizer C. Burton of Lee, which yielded 84 bushels 20 lbs. per acre.

These crops were not measured in the presence of the Town Committee as required by the regulations of the Society; and justice to the members of the Society demand a strict compliance with the regulations adopted, although the officers are satisfied that the above measurement was correct as to the quantity, the same being affirmed by the affidavit of the producer.

The Committee on Field Crops, of the *Washtenaw Ag. Society*, Michigan, state, that "Mr. John W. Van Cleve of Ypsilanti, has raised the present year, from a field of four acres, 168 bushels of wheat by measure, and by weight, 182 bushels, overrunning 5 lbs. per bushel. But was not communicated in time to be entitled to a premium, agreeable to the regulations of the Society, but this fact shows wheat can be raised even to 45 bushels per acre on most of the lands of this county."

The Cayuga Co. Ag. Society awarded to Joseph F. Osburn, the first premium of $8, for the best crop of corn, presented by specimens, both in quality of seed and quantity produced, which is 144 bushels 11 lbs. to the acre.

The second premium of $5, for quantity, (121 bushels 15 lbs. to the acre) was awarded to Jas. Sherman of Springport. The seed we conceive not of the best kind.

The Genesee Ag. Society awarded premiums to H. Brainard, best acre of corn, 97 bushels—best acre of potatoes, 400 bushels—best three acres of spring wheat, 27 bushels per acre. Mr. Brainard had no competitor.

The Monroe Co. Ag. Society awarded premiums for field crops, as follows:

Wheat—To James Beatty, Esq. of Greece, the first premium $10—quantity 53 29-60 bushels to the acre. George Sheffer, Esq. Wheatland, 2d do. $7—40 do. Samuel Shadbolt, Esq. Chili, 3d do. $5—35¼ do.

Corn.—Robert D. Marlin, Chili, first premium, $7—quantity 94 bushels to the acre. Ebenezer Gooding, Henrietta, 2d do. $5—90 do. L. B. Langworthy, 3d do. $3—80 1-32 do.

Potatoes.—Owen McGuire, Greece, first premium, $5—quantity 340 bushels to the acre. George Sheffer, Wheatland, 2d do. $3—312 do. Samuel Davison, Greece, 3d do. $2—280 do.

Roots.—F. P. Root, Sweeden, first premium, on ruta baga, $5—quantity, 1200 bushels to the acre. George Sheffer, first premium on mangle wurtzel, $5—1000 do. Do. do: sugar beet, $5—1160 do.

* This crop excites our surprise more than any one we have heard of, since the famous corn crop of Kentucky, which was said to have yielded 200 bushels per acre. Were the requisite certificates given that Mr. Sherman's potatoes were *correctly* "estimated"?

Agricultural Fairs of 1841.

Never have these Farmers' Holidays been so numerous, so well attended, or conducted with so much spirit and success, as in the present year. The old societies, those which have existed for years, seem to have received new life and vigor; and the new ones, which have everywhere sprung up, will soon overtake, should they proceed as they now promise, their predecessors, in usefulness. Men of all classes appear to be recovering their senses, and at last coming to the conclusion that, from the soil, and by the sweat of the brow, the prosperity of the nation must be built up. The earth does not deal in promises to pay, but where value received, in the shape of labor is deposited, her rate of exchange is most liberal and satisfactory. A dollar will always remain a dollar, call it three or five as we may, as in times past we have done; but to make it three or five, the additional value must be given by labor, by positive industry, not by mere promises. The increase of industry, the greater reliance on labor, is one of the most cheering indications the Fairs of 1841 furnish. Men may get rich by accident, but where wealth is thus suddenly acquired by the individual, there is no accession to the general mass; what the one gains in this case, is taken from that of the many; the general welfare, or the prosperity of the whole, is checked in most of these cases, rather than advanced. There is no royal road to wealth, or even to competence; patient, perserving industry is the only sure method of securing the comforts or the luxuries of life, and the man who loves his country will rejoice at every indication that honest labor is assuming its proper place in public estimation; that the strife is hereafter to be, not who shall blow the most splendid bubbles, but who shall contribute most by their industry to the common stock of national prosperity. Such is the happy condition of things in the United States, that the well informed man, who minds his own business, can, with the ordinary blessing of Providence, scarcely fail of a competence. We say *well informed*, for the man, whatever may be his pursuits, who does not keep himself well informed as to the state of the business he is in, whatever may be his efforts, can scarcely hope for ultimate success, since his labors must of necessity be ill directed, and instead of leading the advance, his whole life may be spent in a fruitless struggle to merely follow. In no pursuit is this fact more conspicuous than in those of the Farmer or Mechanic, and the Fairs of the present season have furnished the most abundant evidence that the prosperity of men or districts in these pursuits, is in accordance with the information within their reach.

It has been a subject of regret with us that we are unable to give more fully the proceedings of the numerous Agricultural Societies in our country, with their several Shows and Fairs, but it would require more space than the ample and closely filled pages of the Cultivator, to contain a tithe of them; and while we tender our acknowledgments to the kind friends who have furished reports, addresses, &c. they will pardon us if we are only able merely to allude to some of the many.

New-England Agricultural Societies.

Now, as heretofore, the farmers of New-England have, in many respects, borne away the palm from all their competitors. There is a spirit and a perseverance among the sons of the Pilgrims worthy of a more general imitation.—a spirit and perseverance which ensures success, whatever may be the pursuit or the nature of the opposing obstacle. With a soil and climate far less fertile and propitious than that of some other sections of the Union, the results of the productive industry of the men of New-England equal that of any other portion, and in some respects exceed them. More variable, and embracing more sources of profit, the industry of the Eastern States more rarely fails of its reward, than that of those sections where the productive labor is limited to fewer articles. In corn, cattle, sheep, swine, and articles of domestic industry these States can show crops, animals and articles that are with difficulty rivaled in any quarter. In working cattle, the farmers of New-England are without rivals; this the recent fairs most clearly demonstrate. We give a single instance, and an honorable one it is, of this fact. The county of Middlesex, (Ct.) held its *first* fair and show at Middletown, in October last. Several of the towns of that small county exhibited nearly 100 pairs of working cattle each; and the train from South Farms was over 100, and that from Durham 150 yoke. These immense trains of beautiful cattle, numbering nearly 400 pair in the whole, came upon the ground attached to vehicles loaded with the various productions of the soil, orchards and gardens, with numerous articles of domestic industry, rich flowers, and fairer women. We might, too, cite the fairs and shows of old Plymouth, the ever interesting one of Worcester, those of Kennebec, and Concord, as cases in point; but those who have had the pleasure of attending one of the fairs of Old Berkshire, and witnessed the plowing match, and the working cattle of that exhibition, will need no further evidence, that on these points the New-Englanders are ununrivaled.

The Fair and Cattle Show of the Berkshire Ag. society was held as usual at Pittsfield, on the 6th and 7th of October, and conducted in that spirited and energetic manner, which has given such deserved celebrity to the Fairs of Old Berkshire. The Berkshire plowing match, which has always been the great point of attraction with the spectators of this fair, (as they will be with all others, when well conducted,) went off with more than ordinary interest, twenty teams being entered, and the performance both as to time and execution being eminently satisfactory. Never has the exhibition of domestic manufactures, or agricultural implements been finer, and the farmers of this beautiful portion of New-England's hills and valleys, showed by their deeds and the deeds of their wives and daughters, that the spirit of '76 and of independence was still strong and active. A large number of cattle were on the ground as competitors for the premiums, and the show of animals was fine. The Hereford bull "Snowball," owned by C. N. Bement, was presented to the Society by Mr. Bement, after a discretionary premium of ten dollars, had been awarded him by the Society. We take pleasure in annually noticing the report of this Society. There is an earnestness in their proceedings, which speaks well for their further progress, and renders them an example worthy of imitation.

At New-Haven, in Ct. the Fair and Show this year far exceeded all former exhibitions of the kind, and evinced that the farmers of that fine section of country are not unmindful of their true interest. There are some beautiful gardens in and about the City of Elms, which contributed much to the interest of the exhibition, as they had before done to the pleasure and profit of the owners. Other cities would do well to take New-Haven for an example in more than one respect; and if they would plant their streets with trees, and expend their surplus wealth in gardens, they would do more for themselves, vastly more than they have yet done. Some 300 pairs of working oxen were brought into the city in long trains from the neighboring towns, and the display of animals was fine. The astonishing numbers of fat cattle, working oxen, milch cows, sheep and swine, which the fairs of New-England have this year called out, would seem to show that the intelligent farmers of those States have anticipated the opinion of Mr. Webster, as given in his agricultural speech at Worcester at the late fair, "that New-England ought to be devoted to the raising of stock, and to the profits of beef and the dairy." This opinion was enforced by the fact, "that all grain growing countries were poor, and impoverished in their soil; while the stock raising and wool growing countries were more flourishing, and with a constantly improving soil." New-England, however, cannot and ought not to renounce the growing of corn, and we are inclined to think a proper division of labor, and a better rotation of crops, would enable her to add materially to her production of grain, while her stock of animals was at the same time increased. But it is evident that the Eastern States must rely more on the sources pointed out by Mr. W. for their farming profits than on their grain crops, corn excepted. All the shows have called out swine which showed how much the breeds have been improved within a few years, and demonstrated most satisfactorily that good hogs, and fat hogs, are not, as some contend, entirely dependant on the capacity of the corn crib. Every farmer who fattens a dozen pigs a year, may save from ten to twenty dollars in the expense of making the same weight of pork, by a choice of animals to feed, independent of the pleasure which the owner of a pen of fine, thriving quiet pigs must feel, when compared with the squealing, restless, all-devouring breeds of the olden time. We observe that at most of the Eastern Fairs, pigs of the Berkshire, Woburn, Leicester, and McKay breeds were shown, but the fine proportions of the Berkshires seemed to obtain for them, with few exceptions, the preference. We have observed that most of the heavy fat cattle shown at the fairs of this year have been crosses of the Short Horns, (the pure blood animals being as yet too valuable to be slaughtered,) and this fact shows the influence which has been already produced in giving a greater weight and tendency to fatten to the cross over the native stock. The effect of the Hereford cross on the stock of the country is yet to be seen; but we cannot doubt that for working or fattening animals it will be most beneficial. Of fat oxen however, the three yoke exhibited at the State Fair at Syracuse have, as yet, borne away the palm, and it is very problematical whether six animals of greater weight can be elsewhere produced in the States.

Fair of the American Institute.

The great Mechanics' Fairs of this country, the present year, have been those of Boston and New-York. That of Rochester was most interesting, as exhibiting what can be done in a country that but a few years since was a wilderness. The fair at New-York, however, embracing as it did, *all* the branches of productive industry, must be considered as having exceeded

all others. That it should have failed in some respects is not to be wondered at, since it was so successful in so many, and the greatest failure must be considered as existing in the paucity of numbers of the blood stock exhibited, when compared with some other shows. The object of the Institute is a noble one, and it has already done much for the cause of domestic industry and home production; it is destined, we think, to do much more. The addresses before it have always been of a high order, and although the gentleman selected (Reverdy Johnson of Baltimore) disappointed the association, the address of the Rev. Mr. CHOULES was not an inferior substitute. It was rich in every species of excellence. We make the following extracts from the report given in Greely's Tribune:

"Mr. Choules dilated on the great benefits realized from the circulation of agricultural periodicals. He once undertook to tell, in passing through a town, what farmers took agricultural papers, from the appearance of their farms, and missed but once in thirteen times. The whole country is enriched by those papers. I almost envy the claims of Judge BUEL on national gratitude.

"I was lately in the company of a son of a bank president—a young man accomplished in his way—who inquired what *neat cattle* meant, and how many years it took *wheat* to come to maturity. I earnestly believe that agricultural papers, generally circulated in our cities, would be productive of the greatest benefit.

"I wish we could create a general passion for gardening and horticulture. We want more beauty about our houses—more to attach us to our homes. The scenes of our childhood are the memories of our future years. Let our dwellings be beautified with plants and flowers. Flowers are, in the language of a late cultivator, 'the play things of childhood, and the ornaments of the grave;—they raise smiling looks to man, and grateful ones to God.'"

We do not think it possible to state in more forcible language the great defects existing in the education of a part of our young men and women, than is done in the second paragraph we have quoted from Mr. C. If the shameful ignorance here described was only that of an individual it would not be so surprising, but it is obvious to every one that this individual represents a large class among our most *fashionable* gentlemen and ladies,—a class, too, which, more than all others, are profuse in their sneers at the honest man or woman who lives and thrives by personal industry. We have no patience with such miscalled *gentlemen and ladies;* their ignorance and airs are alike intolerable and without excuse, and the sooner they are like Nebuchadnezzar turned out to grass, or sent to take lessons from nature in the open fields, the better it will be for them and for the country.

We agree with Mr. C. and with nearly every intelligent traveler who has visited Europe, or rather England, that in only one respect are we in advance of our transatlantic farming friends. Our farm horses are, as a body, better than theirs; and in their most improved breeds for farm labor, they have nothing superior to the Morgan horse of Vermont, or the Conestoga horse of Pennsylvania. We believe that ere long the same remarks will be true of our best breeds of cattle, sheep and swine; certainly they will be if the breeders of these animals here use proper care and skill, as our stock of imported animals is so complete that we have in our hands every element of success.

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Premiums Awarded by the Institute.

HORSES.

Stallions.—To Nathaniel A. Cooper, for the best stud horse, (Messenger,) a gold medal or silver cup of the value of $15.

To Spencer C. Smith, Warren Co., N. J., for the 2d best stud horse, (Top Gallant, Jr.,) a silver medal.

To Dr. John A. Poole, New-Brunswick, N. J., for the 3d best stud horse (Raritan,) a diploma.

Brood Mares.—James A. Hamilton, Dobbs' Ferry, N.Y., for the best brood mare (Janette,) a gold medal or silver cup of the value of $15.

To John H. Coster, New-York, for the 2d best brood mare (Gulnare,) a silver medal.

To Dr. John A. Poole, New-Brunswick, N. J., for the 3d best brood mare (Medora,) a diploma.

Colts.—To Charles M. Hall, Harlem, N. Y., for the best colt, not exceeding two years old (Matchem,) a silver cup of the value of $8.

To John H. Coster, New-York, for the 2d best colt, a diploma.

SWINE.

To Wm. Salisbury, Leeds, for the best full blood Berkshire sow, a silver cup of the value of $8.

To Henry Hudson, for the 2d best Berkshire sow, a diploma.

To Wm. Salisbury, Leeds, for the best Berkshire boar, a silver cup of the value of $8.

To Benjamin Jackson, New-York, for the best shoat, a silver medal.

To Henry A. Field, New-York, for a sow and 10 pigs, Berkshire breed, a diploma

NEAT CATTLE.

To Dr. John A. Poole, New-Brunswick, N. J., for the best bull (Bernard,) a gold medal or silver cup.

To John M'D. McIntyre, for the 2d best bull (Consul,) a silver medal.

To Charles M. Hall, Harlem, N.Y., for the 3d best bull (Young Dishley,) a diploma.

Bulls between one and three years.—To William Pirnie, Westchester co., N. Y., for the best bull (Young Wallace,) a silver cup.

To Dr. John A. Poole, New-Brunswick, N. J., for the 2d best bull (Carter,) a silver medal.

Cows between three and seven years.—To Henry Whitney, New Haven, Connecticut, for the best cow (Strawberry,) a silver cup.

To Thomas Addis Emmett, New-York, for the 2d best cow (White Lily,) a silver medal.

To William Pirnie, Westchester co., N. Y., for the 3d best cow (Fanny,) a diploma

To Dr. John A. Poole, New-Brunswick, N. J. for the best heifer (Eliza,) a silver medal.

To James De Wolf, Throg's Neck, Westchester co., N. Y., for the 2d best heifer (Lucy,) a diploma.

Calves.—To Dr. John A. Poole, New-Brunswick, N. J., for the best calf (Franklin,) a silver cup.

To Stephen Van Rensselaer, Albany, N. Y., for the 2d best calf (Emma,) a diploma.

To John A. Poole, New-Brunswick, N. J., for a three months old calf, a diploma.

To Nelson Washbun, for Devon bull and Devon heifers, excellent specimens of full bloods, a silver medal.

To Wm. R. Townsend, New-Haven, Conn., for a pair of Durham oxen, live weight 5245 lbs., a silver cup.

SHEEP.

To H. N. Washbun, Butternuts, Otsego co., N. Y., for the best specimen of South Down ewes, a silver cup.

To Samuel Waite, Orange co., N. Y., for the best specimen of South Down bucks, a silver cup.

To Charles M. Hall, Harlem, N. Y., for the best specimen of Bakewell bucks, a silver cup.

To Messrs. Corning & Sotham, Albany, N. Y., for the best specimen of Cotswold bucks, a silver cup.

To George Wilson, Westchester co., N. Y., for the best specimen of Lincolnshire bucks, a silver medal.

To Francis Rotch, Butternuts, Otsego co., N. Y., for a South Down wether of great beauty and merit, a diploma.

To Stephen Brown, Westchester co., N. Y., for superior specimens of Bakewell fat ewes, a silver medal.

AGRICULTURAL IMPLEMENTS AND MACHINERY.

J. Scott & Co., 21 Courtland-street, N. Y., for the best assortment of agricultural labor-saving machines. Gold medal.

Justus Slater, (Barnaby & Moore's patent,) Ithaca, N. Y., for the best plow. Gold medal.

Minor & Horton, Peekskill, N. Y., for the second best plow. Silver medal.

Abel Greenleaf, Williamsburgh, L. I., for the best straw cutter. Silver medal.

Martin Armstrong, Williamsburgh, L. I., for the second best straw cutter. Diploma.

Gideon Freeborn, 183 Front-street, for the best corn sheller. Diploma.

John Mayher, Front-street, for the second best corn sheller. Diploma.

George Page, Baltimore, Md., for the best corn planter. Silver medal.

Calvin Olds, Marlborough, Vt., for the second best corn planter. Diploma.

H. Baldwin, Washington, Conn., for the best clover seed mill. (Silver medal awarded last year.) Diploma.

Joseph Ross, Boundbrook, N. J., for a combined clover seed and thrashing machine. Silver medal.

William A. Crowell, Lime Rock, Conn., for the best churn. Diploma.

Jordan L. Mott, Water-street, for the best agricultural boiler. (Silver medal awarded last year.) Diploma.

Solon Robinson, Lake county, Indiana, for a vegetable steamer, (simple and cheap.) Silver medal.

Josiah Platt, Bridgeport, Conn., for the best mill for grinding feed. Diploma.

Isaac Scott & Co., 21 Courtland-street, for the second best mill for grinding feed. Diploma.

D. H. Southworth, Newburg, N. Y., and Charles Dowden, Speedwell, N. J., for excellent smut machines, no difference being susceptible to the judges. A diploma, certifying a gold medal before awarded to Southworth, and a gold medal to Dowden.

D. A. Webster, 20 Bowery, N. Y., for a thrashing machine, (elastic beaters.) (Silver medal before awarded.) Diploma.

John Fitchey, Newburg, N. Y., for a thrashing machine, (elastic bed.) Silver medal.

E. Townley, 175 Thompson-street, for excellent bee hives. (Silver medal before awarded.) Diploma.

John Sholl, Houston-street, for a rustic bee hive. (Silver medel before awarded.) Diploma.

John Searle, Franklin, Merrimack co. N H., for a new method of constructing bee houses and bee hives. Diploma.

E. Swift, Dutchess co. N. Y., for a vegetable cutter. Diploma.

Mark Poole, 100 Orchard-street, for an excellent garden engine. Silver medal.

Jonathan Reed, 76 Barclay-street, for a horse-power reaping machine. Silver medal.

H. Branch, Fulton-street, Brooklyn, for a corn cultivator. Silver medal.

D. K. Minor, 120 Nassau-street, for a barrow drill. Diploma.

Daniel Markhams, Burlington, N. Y., for a portable fence. Diploma.

Martin Armstrong, Williamsburgh, for a horse-power straw cutting machine. Diploma.

J. B. Vail, Columbia county, N. Y., for a specimen of hay pressing. Diploma.

AGRICULTURAL PRODUCTIONS, &c.

Johanis J. Lott, Flatlands, Kings county, L. I., for the best field of corn—yield 114 bushels 2 quarts per acre. Silver cup.

John Schenck, Bushwick, L. I., for the second best field of corn—yield 112 bushels 16 quarts per acre. Diploma.

George Chesterman, Harlem, N. Y., for the best specimen of Long Island white corn. Diploma.

J. G. Bell, New-York, for the second best specimen of white corn. Diploma.

E. Holbrook, Hyde Park, N. Y., for the best bushel of wheat. A set of the Cultivator.

James Turner, Albany, N. Y., for a superior specimen of wheat. Silver medal.

Richard Andrews, Rockland county, for the best bushel of rye. A set of the Cultivator.

William Hughes, Gowanus, L. I., for the best bushel of oats. Silver medal.

Stephen Yates, St. Johnsville, Montgomery co. N. Y., for the best specimens of cheese. Gold medal

B. W. Plumb, 3 Front-street, for the second best specimen of cheese. Silver medal.

B. W. Plumb, 3 Front-street, for specimen of pine apple cheese. Diploma.

Coe, Hubbel & Co., Winchester, Conn., for specimens of cheese. Diploma.

William Webb, Wilmington, Del., for specimens of sugar made from corn stalks. Diploma.

Dr. F. M. Bolles, Harris' Island, Conn., for the best specimens of seedling potatoes, (Bolles' seedling.) Copy of Bridgeman's Gardener's Assistant.

Thomas Bridgeman, Broadway, for the best Practical Treatise on Fruit and Garden Vegetables, "Bridgeman's Gardener's Assistant." Gold medal.

A. Hoffy, Philadelphia, Pa., for an excellent Treatise on the Fruits of the United States. Silver medal.

Alexander Walsh, Lansingburgh, N. Y., for the best design for an Ornamental Garden, with explanations. Gold medal.

D. L. Farnham, 247 Water-street, for the best metal fountain. Gold medal.

RAW AND MANUFACTURED SILK.

Mrs. M. Everson and Mrs. H. Lee, Ithaca, Tompkins county, N. Y., for the best specimen of raw silk. Gold medal.

Wm. O. Norcross, Munson, Mass., for the second best specimen of raw silk Silver medal

Jeoffry Hutchinson, Suffolk county, L. I., for a handsome specimen of raw silk. Silver medal.

Mrs. M. Everson and Mrs. H. Lee, Ithaca, Tompkins county, N. Y., for the best specimen of large peanut cocoons. Silver medal.

Edmund Morris, Burlington, N. J., for the second best specimen of peanut cocoons. Diploma.

Wm. H. Jones, Manchester, Conn., for the best specimen of sewing silk. Silver medal.

Mathias Price, Newark, N. J., for handsome specimens of floss silk, cleansed silk, and spun silk hose. Diploma.

John McRae, 109 Canal-street, for the best specimens of manufactured silk, (shawls, cord and braid.) Silver medal.

B. S. Yates, 73 Bleecker-street, for specimens of silk handkerchiefs, silk for dresses, cords and tassels. Silver medal.

SILK REELS, MACHINERY, &c.

Thomas White, Nashville, Tennessee, for the best domestic silk machine. Gold medal.

Aaron Clarke, Greenwich, Conn., for the best silk reel for domestic use. (Silver medal awarded last year.) Diploma.

Samuel Blydenburgh, 13 Vandewater-street, for the second best silk reek, (having several excellent qualities.) Silver medal.

Wm. H. Jones, Manchester, Conn., for the best silk reel for a manufactory. (It dispenses with re-reeling.) Silver medal.

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Reports of Viewing Committees.

We have always found that the reports of the viewing committees on farms, and the state of agriculture generally, if made in the right manner, have excited as much interest in the local or county societies, as any part of the proceedings. In some societies this season we find this has been omitted, no committees having been appointed, and no reports having been made, an omission which should not occur another year. One of the best papers presented to any society the present year, one calculated to do much good, and which might profitably be made exemplar in many other counties, is the report of the Jefferson County Viewing Committee, as made to the County Agricultural Society. When a few able farmers, and experienced observing men, traverse a county, and visit farms, dairies, &c. for the express purpose of comparison, they more readily recognize improvements, or more certainly detect errors, than men who have no such object in view. Their observations and their recommendations have deservedly great weight on all subjects connected with agriculture, and every farmer who takes an interest and pride in his profession will be pleased to receive a visit, and profit by the suggestions of such men. It has occurred to us that in large counties, town committees for ascertaining the quantities of grain, roots, &c. grown, when it was intended to offer such for premiums, might be appointed, as their reports could not conflict, and would probably bring out a greater number of farmers as claimants for premiums than is now done. Some of the reports of committees made to societies this year have very properly noticed the subject of large and small farms. We scarcely could name any error among farmers so common, or so pernicious, as the anxiety for large farms. We have no doubt that if all the farms of this State of 100 acres and over were divided, and the manure and labor given to the whole, applied to one-half, that the products and profits would be greater than they now are; and the only way to make great farms pay as well as small ones, is to employ the same proportion of capital in labor and manure, a thing rarely or never done in this country. If the man who has a hundred acres of land here, would divide it with his son, instead of sending the latter to encounter the dangers and privations of a new region that he may have more land, we presume both would, in most cases, be benefited by such an arrangement. The man who has brought his small farm to the highest point of fertility, will usually be able to find other acres near, that may be advantageously submitted to a similar process.

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Mr. Howland's Address.

One of the most interesting addresses we have this year read or heard, is the one by H. HOWLAND, before the Cayuga Society at Auburn. We alluded to it in our last number, but refer to it again in this place for the purpose of recommending it to the attention of our readers, who will find it on another page of this number. It is local, concise, direct. The sketch of the early history of that county is valuable; (those who wish for more ample details of the matters to which Mr. H. alludes, will do well to consult O'Reilly's "Rochester;") the statistics of the county, important to an understanding of the resources of that section, and his remarks on the agriculture and course of farming pursued, or most advisable, plain and just. There is in the paragraph addressed to young men much that we wish those who are just entering upon the active business of life, would ponder upon carefully. The advice is that of truth and soberness, and sooner or later will be acknowledged as such.

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Cuyahoga Agricultural Society.

The Cleveland, Ohio, Cattle Show and Fair attracted a great number of farmers and others, and despite the stormy and disagreeable weather, excited much interest in that flourishing section of the country. There was a very handsome exhibition of horses, cattle, sheep and swine; and a manifest improvement in native stock over that of former exhibitions was visible. Some fine fat cattle, rarely equalled in the markets of Philadelphia or New-York, were shown, and beautiful Durhams from Cuyahoga, Lorrain and Summit counties. Owing to the unfavorable weather, the plowing match was poorly attended, and the in-door exhibition of manufactures, agricultural implements, fruits, flowers, &c. became the great point of attraction and interest. The address of J. W. ALLEN, Esq. was rich in its illustrations, facts,

and peculiarly happy in arrangement. There was an evident determination manifested by those who attended the fair to go ahead, and by the experience annually gained, correct the errors into which such associations are liable to fall. Ohio is a noble State, and the rapid advances she is making in the improvement of her stock, and in agriculture generally, would seem to border on the marvelous, were it not accounted for by the well know energy and spirit of the American people.

Genesee Agricultural Society.

The exhibition and fair of the Genesee Agricultural Society was held at Alexander on the 13th and 14th of October. In cattle and horses, the show was fine; but in sheep and hogs, and mechanical and agricultural productions, there was a marked falling off from last year. As usual, the plowing match was the most exciting part of the exhibition, and quite a number of teams were entered for competition. The quantity of land was one-eighth of an acre each, and the plowing was done in from 12 min. 10 sec. to 16 min. 20 sec. This must be considered quick plowing, and the work in general was very well done. We are sorry to learn from the President of the society, T. C. PETERS, Esq. that Old Genesee, one of the richest farming counties in the State, and with some 7,000 farmers, did not raise by membership, or contributions, enough to draw from the State the sum to which they were entitled, into more than $60. But these minor matters will be corrected another year, defects in management will be gradually corrected, and the farmers of this beautiful and prosperous county place their society in the position to which it is entitled by its wealth and its locality.

Ag. and Hort. Society of Henrico, Va.

WE find in the Richmond papers interesting accounts of the *second* meeting of the above society, (the *first* was held in May last, and noticed in the Cultivator,) which was held on the 20th and 21st days of October. The number of persons in attendance was very great, principally active and spirited cultivators of the soil; the exhibition received the encouragement and patronage of the patriotic ladies of Richmond and the vicinity; and the whole proceedings were characterized by that noble spirit of liberality and good feeling which marks the high-minded farmers of the Old Dominion. We rejoice in the success of this association, as we do of all similar ones, as we are convinced the example of the Henrico and Frederick County Societies will have a happy effect in arousing the spirit of the Virginia agriculturists, and directing their attention to that object of the first interest, the improvement of the soil and the methods of culture.

The meeting in May had for one of its principal objects the exhibition of stock of various kinds; and the October meeting was in the main devoted to hearing the reports of the farm viewing committees; an examination of horticultural products; and hearing an excellent address from the President of the society, the Rev. J. H. Turner. The reports from the viewing committee were, as we have always found such reports to be when well made, very interesting, as showing the different modes of managing farms, and the best methods of rendering them productive. It is gratifying to learn from the report of the executive committee that the finances of the society are in a flourishing condition. At the meeting in May, premiums to the amount of $205 were awarded; at the October meeting $375 were appropriated; and the treasurer's account exhibits a balance on hand of $445. We are pleased, too, to perceive that most of the farmers, whose premises were inspected by the committee for awarding premiums on farms, were subscribers to agricultural papers, among which the Cultivator occupies a prominent place. This is adding one more to the already numerous proofs existing, of the beneficial effects which such papers are exercising on the community.

The farm report made to the society by the President is a striking proof of the compatibility of a love of agricultural pursuits with a highly cultivated mind. His detail of the manner in which he brought a few sterile acres to such a state of productiveness as to enable him to add to the size of his farm as desired, may be read with profit, and if we can make room for it, shall transfer it to our pages hereafter. But the grand principle acted upon by him, has been forcibly sketched by himself in the following extract, which we make from his address delivered on the second day:

"The simple principle for which I contend is, that no man should have more land than he can manage to profitable advantage. According to this rule, some would lop off one-half, and others as much as nine-tenths, and I have no doubt the remainder would prove more profitable than the whole. These surplus lands are not mere dead capital—they are *living* capital, for they prey upon and consume our other profits. The proper rule to go by is this—*make what you have a garden spot*—a second Eden, and then you may venture to clear or buy more land."

The specimens of fruits, flowers and vegetable products were very numerous and fine; and the crops which received premiums were honorable to the men who cultivated them. They proved, too, that with proper skill in the treatment of their soils, Virginians need not emigrate to the far west to derive from their labor the necessaries or the luxuries of life.

We had promised ourselves liberal extracts from the address, but we find the space necessarily allotted to such notices is already much exceeded, and give only one more extract, which is not only forcibly expressed but eminently true: "A spirit of energy and enterprise has been enkindled by our society, which has called into action a degree of effort never known among us before. I feel myself warranted in saying, that many acres of land have been manured, and many barrels of corn, and many bushels of beets, turneps and potatoes raised, and many specimens of the domestic arts furnished—all of which have been called into existence in consequence of the powerful stimulus of our society. And this is the very thing we had in view in our association. We arouse every man to do the best he can for himself, and just in proportion as he succeeds in this we pay him in distinction and in money."

N. YORK COUNTY SOCIETIES.

ALBANY.—An agricultural society was organized in this county on the 23rd September last. The following officers were elected: Stephen Van Rensselaer, President; John McDonald McIntyre, Albany, John Haswell, Bethlehem, Oscar Tyler, Bern, Abraham Verplank, Coeymans, Caleb N. Bement, Guilderland, John A. Baker, New-Scotland, Amos Gray, KNOX, Robert S. Lay, Westerlo, Peter S. Vandenbergh, Watervliet, David Conkling, Rensselaerville, Vice-Presidents; A. E. Brown, Albany, Treasurer; Thomas Hillhouse, Watervliet, Recording Sec.; Luther Tucker, Albany, Corresponding Secretary.

At the late Fair of the CAYUGA CO. AG. SOCIETY, John M. Sherwood of Auburn, was elected President; a Vice-President, and member of the Executive Committee was chosen for each town in the county; William Richardson, Auburn, Rec. Sec.; Wm. C. Beardsley, Auburn, Cor. Sec.; John B. Dill. Auburn, Treas.

Officers of the CLINTON CO. AG. SOCIETY:—William F. Haile, President; A. North, William Hedding, R. Keese, and S. Arnold, Vice-Presidents; G. M. Beckwith, Rec. Sec.; J. C. Platt, Cor. Sec.; J. Bailey, Treas.

Officers of the DUTCHESS CO. AG. SOCIETY.—Henry Staats, Red-Hook, President; John Wilkinson, Union Vale, Thomas Swift, Amenia, and Stephen S. Thorn, Fishkill, Vice-Presidents; Obadiah Titus, Washington, and Edgar Sleight, Fishkill, Secs.; George Wilkinson, Poughkeepsie, Treas.

GREENE CO. AG. SOCIETY.—The following list of officers of this Society has been furnished us by A. Marks, Esq.:—Anthony Van Bergen, Coxsackie, President; William Salisbury, Leeds. Timothy J. Miller, Greenville, George Griffith, Athens, Christopher L. Kiersted, Durham, and Elisha Blackman, Cairo, Vice-Presidents; Almeron Marks, Durham, Rec. Sec'y; Richard Van Dyke, South Cairo, Cor. Sec'y; Cornelius Rouse, Catskill, Treas.

Officers of the HERKIMER CO. AG. SOCIETY:—Arphaxad Loomis, President; Samuel Look, Schuyler, Vice-President; Aaron Petrie, Little Falls, Sec.; Frederick P. Bellinger, Treas. Delegates to the STATE AG. SOCIETY:—A. L. Hatch, Elias Fink, Timothy J. Campbell, John Ingersoll, Z. B. Wakeman, A. L. Fish, Aaron Petrie, John Markell, James Keith, Hiram English, E. Varney, H. Burrell, Samuel Look, George Springer, Peter Morgan, and R. Sandford.

Officers of the LEWIS CO. AG. SOCIETY:—Clemence Whitaker, President; Johnson Talcott, Carlos Hart, Charles D. Morse, Harrison Blodgett, Elias Gallup, and Alburn Foster, Vice-Presidents; Stephen Leonard, Cor. Sec.; Charles Dayan, Rec. Sec.; Harvey Stephens, Treas.

MADISON CO. AG. SOCIETY.—An Agricultural Society was organized in this county on the 1st September last, and the following officers appointed:—J. D. Ledyard, Cazenovia, President; Elijah Morse, Eaton, H. G. Warner, Sullivan, J. H. Dunbar, Hamilton, Vice Presidents; A. Krumbhaar, Cazenovia, Cor. Sec'y; A. S. Sloan, Eaton, Rec. Sec'y; Uriah Leland, Eaton, Treas.

ONTARIO CO. AG. SOCIETY.—At the Annual Fair held at Canandaigua, on the 12th of October, the following officers were elected for the ensuing year:—John Greig, Canandaigua, President; Charles Godfrey, Seneca, Heman Chapin, East Bloomfield, Peter Mitchell, Manchester, Joseph Fellows, Geneva, Wm. Ottley, Phelps, and Joseph Garlinghouse, Richmond, Vice-Presidents; Wm. W. Gorham, Canandaigua, Rec. Sec.; Oliver Phelps, Canandaigua, Cor. Sec.; James D. Bemis, Canandaigua, Treas.

ORANGE.—A Society was organized in this county in September last, and the Fair was to have been held at Goshen, on the 17th November; but we have not received its proceedings or list of officers.

QUEENS CO. AG. SOCIETY.—A Society was organized in this county, on the 9th Oct. as we learn by a letter from A. G. Carll, Esq. under favorable auspices. The following officers were appointed:—Effingham Lawrence, Flushing, President; Geo. D. Coles, Singleton Mitchell, Walter Bowne, Jr. T. B. Jackson, Geo. Nostrand, and Platt Willitts, Vice Presidents; Albert G. Carll, Jericho, Cor. Sec'y; John G. Lambson, Hempstead, Rec. Sec'y; D. E. Youngs, Treasurer, and D. W. Jones, R. W. Mott, Ezra Miller, T. H. Betts, John Johnson, and Israel Hewlett, managers.

SARATOGA CO. AG. SOCIETY.—At its annual meeting on the 6th October last, Howell Gardner of Greenfield, was elected President; Calvin Wheeler of Providence, 1st Vice President; Jacob Denton of Saratoga Springs, 2d Vice President; Hiram Howard of Milton, Treasurer; Archibald Smith of Ballston Spa, Cor. Sec'y; John A. Corey of Saratoga Springs, Rec. Sec'y; and an Executive Committee of two from each town was also appointed. An address was delivered by Hon. SAMUEL YOUNG, a copy of which was requested for publication, and the President of the Society, E. C. Delavan, Samuel Young, James Thompson, Halsey Rogers, Edward Davis and A. Y. Lansing, were appointed delegates to the New-York State Agricultural Society for the ensuing year.

SCHENECTADY CO. AG. SOCIETY.—An Agricultural Society has been organized in this county, and the following officers were appointed:—William A. S. North, Duanesburgh, President; John I. De Graff, James Walker, Gerrit W. Veeder, Abraham Pearse, Theo. W. Sanders, James Smilie, James Ferguson, and Daniel D. Campbell, Vice Presidents; Archibald L. Linn, Schenectady, Cor. Sec'y; Alexander G. Fonda, Rec. Sec'y; William B. Walton, Treasurer.

STEUBEN CO. AG. SOCIETY.—The Fair of this society was held at Bath, Nov. 10, and though the Society had been but recently organized, it exceeded in numbers and interest, the expectation of its friends, showing that the farmers of Steuben "participate in the general forward march of their brethren in all sections, to elevate their calling, and to make it in reputation what it is in fact, the most honorable and consistent occupation of man."

The following gentlemen were elected officers of the WASHINGTON CO. AG. SOCIETY, at its anniversary meeting on the 12th October:—John Savage, Salem, President; William Baker, Fort Ann, Ahira Eldridge, White Creek, Reuben M. Norton, Cambridge, and John Baker, Granville, Vice-Presidents; John McDonald, Salem, Cor. Sec.; Asa Fitch, Jr. Salem, Rec. Sec.; Jesse S. Leigh, Argyle, Treas.

Great Crop of Oats.

IN a late number of his Visitor, Gov. Hill gave an account of a fine oat crop he had raised the present year, described the process of cultivation, and invited any one who had grown a better crop to communicate it to the public. The four acres of Gov. Hill, gave 275 stooks of 12 bundles to a stook, and the thrashing of a part of the crop shows a yield of about 70 bushels per acre; handsome certainly, but as a west New-Yorker would say, "nothing extravagant." The playful challenge of Gov Hill, has called out a Vermont farmer, DRANCES JUNE, who in the Vermont Chronicle has given an account of his oat crop on four acres, and the manner in which the Green Mountain Boy has used up the champion of the Granite State, is a caution to all oat growers. Mr. June says,—"Our lands were about under equal cultivation to begin with In the season of 1839, my land was plowed up in the sward. In the month of May, 1840, it was plowed and thoroughly harrowed; then 20 loads of good manure were spread to the acre, and all plowed in to the depth of four inches, and harrowed down smooth. Then the four acres were planted to potatoes; and I harvested 977 bushels from the lot. In the spring of 1841, the land was plowed once, and I sowed 16 bushels of oats upon the four acres. The oats stood remarkably well; but few lodged, and the cause, I think was, that we had no rain to limber or burden the stalk after the oats began to fill. The piece was reaped and the oats bound in large bundles, so large that it was difficult in many instances to stook twelve bundles in a stook. I had them stooked in that manner for the sake of counting correctly, and the result was 588 stooks If New-Hampshire has beat Vermont in oats this year, let us know it, and we will try them next season."

This is truly "prodigious," and if Mr. June's oats yield as much per stook as Gov. Hill's, it will be one of the heaviest, if not the very heaviest crop of oats on record, being at the rate of 147 bushels per acre! The greatest crop yet grown in the United States, was by our friend Osborne of Cayuga, of 130 bushels to the acre; and if on thrashing his crop, Mr. June should exceed Mr. Osborne, we opine the latter will try again. There is one statement in Mr. June's account which we wish our farmers when they come to sow oats next spring to remember, and that is the quantity of seed per acre, *four bushels*. A celebrated English farmer a few years since observed that, "the best method of sowing oats he knew was to scatter them with a shovel from a cart;" and our experience, as well as the statement of Mr. June, would go to show that the quantity of seed used for this crop is much oftener too small than too large. Vermont is one of the best states in the Union for spring crops, and if she has produced many crops like the above the wonder will cease at her being at the head of the states in the value per head of her productions; that state averaging 148 dollars, while the next highest is only 111 dollars, and the average of the whole not 80 dollars. We shall hope to have from Mr. June an account of the product after thrashing, as in the case of such crops nothing should be left for guessing or for doubts.

GRAPE VINES IN WINTER.—There are few of the grapes requiring protection in the winter, that are worthy the attention, or will repay the care of the farmer, still some may have such vines, and for the benefit of those we would state that the Maine Cultivator recommends as a preservative from frost, a covering of hemlock boughs, as turning water better, and being more compact than straw, which is most generally used

ORIGINAL COMMUNICATIONS.

"In Agriculture, Experience is of great value—Theories of little, excepting as they are directly deducible from actual experiments and well attested facts."

Comments on the Oct. No. of the Cultivator.

Messrs. Gaylord & Tucker—The first page of this number, indeed I may say almost every page, affords abundant evidence of the heart-cheering fact, that the desire to improve American husbandry is rapidly diffusing itself over our whole country; and all that is now wanting to enable American farmers soon to compete successfully with those of Europe, will be to give this desire a proper direction, and zealous, persevering encouragement. Your excellent paper has already done much in this truly patriotic work; and long, very long, do I hope, that it may continue its laudable efforts. These few prefatory remarks I could not deny myself the pleasure of uttering, since I venture to say, that none of your readers can have derived more entertainment from your Cultivator than I have, nor can many have received more information.

The first article that attracted my attention was the list of premiums offered by the American Institute. The managers have evidently taken it for granted, that all competitors will be actuated solely by the principle of honorable ambition, for nothing has been offered but gold medals. But there is not a man who has ever had any thing to do with an association or society which gives premiums for such objects, but must know, that the love of money is a stronger passion to address. The Highland Agricultural Society of Scotland, and the Royal Agricultural Society of England, have been well aware of this difference; and therefore, we find that a large portion of *their* premiums consist of cash. Would it not be well, then, if not only the American Institute, but our numerous agricultural societies, would follow their example? I have had many years' experience, not as a competitor for premiums, but a contributor towards them; and feel very confident that where five would compete for a gold medal, there would be at least ten competitors for its value in dollars and cents. In this respect, the nature of man cannot be much or effectually changed by any sort of institute, but that of moral and religious education.

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Much is said in this number about the Hessian fly; but unless some of the individuals who write on the subject will point out some effectual way to prevent its ravages, practical farmers in general, will care not a straw by what entomological name it may be christened, nor to whom the honor may be awarded of ascertaining its true scientific title.

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In a note to the article headed "Crops of 1841," you remark that "the quality of the wheat crop of 1841 has never been exceeded." This remark should have been limited to the states north of the Potomac, if not to those beyond the Susquehanna, since to the south of the former river, my information is, that the crop is below the average quality.

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Under the head of "Proper Improvement of Land," you have cited one very remarkable case to prove how far beyond all common belief, its productiveness may be increased; and there are very few things with which your paper could be better filled than with details of similar cases, provided they were accompanied by detailed statements of the various modes of improvement. Nothing could well do our brethren more good, for no subject is more important to them; nor is there any scarcely of which they are more generally ignorant or careless.

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Treatment of the Horse.

Your correspondent W. B. from North Carolina, expresses a wish "*to see some extended remarks on the best manner of treating work and traveling horses*;" and you ask some of your correspondents to reply to his inquiry. To do so fully would require a book or pamphlet of a considerable size. But the subject is highly important to all who own horses, and particularly to those, of whom there are many, who know little or nothing of their proper treatment; I will, therefore, offer a few remarks in the hope that some of your numerous correspondents who are better qualified than I am, may be tempted by my efforts to enlarge upon it. My observations will consist chiefly of directions condensed from two works published in England, under the supervision of the Society for the Diffusion of Useful Knowledge. The first is entitled "*The Horse*," and is by far the best treatise I have ever read in regard both to the theory and practice of the veterinary art; no farmer should be without it. The second was published only last year, and is called "*Outlines of Flemish Husbandry*." It contains many very useful directions as to the management of farm horses, the correctness of which, as well as of those in the Horse Book, none could fail to perceive, if I had room to present the reasons for them, together with the directions themselves.

To begin with the stable. This should be so constructed that its temperature during spring, summer, and fall, should be very nearly the same as that of the open air; and in winter, not more than 10 degrees above that of the external atmosphere. The size recommended as best, is (in the proportion for six horses) 40 feet long, 13 or 14 wide, and 12 feet high, if a loft is made to it, in which case there should be a plastered ceiling, to prevent the hay from being scented by the exhalations of the stalls and floor. The whole stable, especially the stalls, should be kept as clean as practicable, by frequently changing the beds and strewing plaster of Paris on those spots where the urine falls. This not only prevents its offensive odor, by combining with its ammonia, but thereby forms one of the most powerful of all the new manures yet discovered. The floor of the stalls should be sloped barely enough to drain off the urine not absorbed by the litter and plaster of Paris, since a level position for the horses' feet is the most natural, and consequently best for the muscles and sinews of their legs and ankles.

Light is quite as essential to the soundness of your horses' eyes, as pure air is to the health of his body. But it should be let in through glazed windows, and open gratings, which serve also as ventilators, under the eaves of the roof. No openings should be made, either under the mangers, or opposite, or just above the horses' heads, as partial streams of air often produce colds, with all their bad consequences in horses; especially if they are put up in such stables immediately after being much heated, and before they are rubbed dry. A glaring light, however, should always be avoided, since horses can neither rest, nor sleep, nor fatten so well in such light, as in that which is moderate.

Under the head of "*grooming*," it is recommended to treat farm horses differently from those kept for the saddle and carriage. The farm horse which is worked hard all day, and turned out at night, requires little more than to have the dust brushed off from his limbs, since the dandruff or scurf which is removed by the curry comb, is a provision of nature to defend him from the wind and the cold. But if generally stabled, then currying, brushing, and rubbing are necessary. These operations are indispensable to saddle and carriage horses; and should always be performed in the open air when the weather permits. They open the pores of the skin, aid in circulating the blood, in augmenting free, healthy, insensible prespiration, and serve instead of exercise, when that cannot be taken. Moreover, if regularly and carefully performed, with a plenty of good food in which two or three table-spoons full of brown sugar is occasionally mixed, they will secure that fine, glossy, dappled coat, to attain which, the health, and not unfrequently the life, of the horse is sacrificed, by keeping him covered up with blankets. Care should be taken in using both the curry-comb and brush, especially when new, not to apply them roughly, particularly to horses that have tender skins, and fine, thin hair. For all such, the curry-comb is hardly necessary, if they are well rubbed, and dressed with a soft brush and hair-cloth.

Horses which are constantly stabled, should be moderately exercised for two hours a day, when the weather permits, if you would keep them perfectly healthy. This, however, should depend somewhat on their age, as a young horse requires more exercise than an old one. But for neither should it be violent, when given for health; nor should the horse ever be put up until he is cool. The whip or spur should never be used for any fault but dullness or obstinacy, although it is very common to do it both for starting and stumbling, both of which are certainly aggravated by it, and thereby the rider punishes himself, in the end, much more than he does his horse. In fact, harsh, cruel treatment to horses, succeeds as badly as it does with children; and all who are so brutal and inhuman as to be guilty of it, deserve well to become its victims: neither whip nor spur would be bad remedies for *their* detestable tempers and habits.

It is common, immediately after hard working or traveling in hot weather, to wash horses all over, or to swim them in water much cooler than their skins or the atmosphere. This practice is very dangerous, often producing colds, fevers, and not unfrequently, fatal chronic complaints, unless the same exercise is speedily repeated. Even the partial application of very cold water to parts of the body, or the head, or the legs, when the horse is much heated, should be avoided; for his appearing to be gratified by it is no more a proof that it is good for him, than the manifest gratification of a sot in dram-drinking, after having been drunk, is proof that *he* is benefitted thereby. The poor horse which knows no better, experiences present relief, at the expense of future suffering that he is incapable of anticipating, or brute as he is, he would probably reject it. Rubbing in the shade and leading the horse about at intervals, constitute the proper treatment both for farm and other horses, when much distressed by severe work of any kind.

But all precautions to preserve the health and vigor of your horses will prove unavailable, unless you pay equal attention to the kind and quality of their food; the manner of feeding them, and also of giving them water.

To enable either farm or other horses to render the utmost service of which they are capable, they should be fed wholly on dry food, the grain and long forage to be old and sound, the first of which should be ground, and the latter chopped in all cases where practicable. For saddle and carriage horses under hard and constant usage, oats are better than Indian corn, and that is preferable to every other grain. The blades also, when well cured, are better than any other kind of long forage, as they contain more saccharine matter. When either farm or other horses are much heated, and great haste is indispensable, no other food should be given them than a small hand-full or two of old corn or oat-meal stirred into a few quarts of soft water, with a little salt dissolved in it. Before this is given, let their nostrils, inside and out, be cleansed by a sponge or rag wet with vinegar and water, if the former can be procured, if not, with water alone. After a very hard ride or travel in harness, the horse should be suffered to wallow, before any thing else is done to him, if time and weather permit, rather than to be led immediately into a stable to be cleaned and cooled.

Manger feeding with ground grain and chopped long forage, is now very generally preferred in England and Belgium, as well as by the best judges in our own country, to the old fashioned, most wasteful way of giving unground grain in mangers, and unchopped forage in racks. These last are disused every where, but in a few places for green grass; and in lieu of the rack, wide, deep mangers are adopted, with small iron or wooden bars fastened across them, to prevent the horses from throwing out their food. In England the most common food for farm horses consists of a mixture of bruised oats, beans, and chaff, in the proportion of eight pounds of oats, which are equal to about five quarts, (their oats being a few pounds heavier per bushel than ours,) two pounds of beans, with twenty of chaff. Thirty-five or six pounds of such food is the day's allowance for medium sized horses while at work, and forty pounds of it for large horses. Such is the common allowance during winter, when the horses are constantly stabled. But from the end of April to the end of July they are usually turned out at night, and the whole of rest days. Other kinds of food, however, are much used by small farmers, such as barley, unmerchantable wheat, beans, peas, sweedish turneps, carrots, and potatoes, with grasses of various kinds, but very little oats or rye. In Belgium the chief food of their farm horses consists of green clover in summer, and roots with cut straw in winter. A few oats are occasionally given, but not in so regular a manner as to give great muscular strength. They usually go to work as soon as it is light, continue at it until ten, then rest and feed until two or three o'clock, when they resume and continue their labor till six or seven. In harveat time they work from daybreak until evening, resting only a few hours in the heat of the day. A pair of horses with one plow are allowed for every 40 acres of arable land, the whole of which, on an average, is plowed twice and harrowed three times; besides this they cart fodder and manure, and do the harvest work. Both in Belgium and England, they are moderately watered before and after feeding. When not worked, water is given them three times a day, and always of the softest kind, when it can be procured. In ordinary traveling also, a liberal supply of such water is strongly recommended to be given, a little at a time, which prevents excessive thirst, and the consequent drinking to excess. This is very dangerous, especially to a horse much heated, especially if the water be very cold.

In addition to the foregoing condensed remarks, taken chiefly from the two excellent works already mentioned, permit me now to offer such information as I have derived from others and from my own long experience as an owner of every kind of horse but the race-horse, in regard to the best mode of managing those most useful animals, in our own country. I will "begin, (as the saying is,) at the beginning."

Colts should always be weaned before the grass is generally gone, and should be put into some enclosure where they cannot hurt themselves. Their dams should be stabled for a few days, and milked if their bags swell much. These colts should never be stabled until broke, nor much after that before they are full grown. But they should have well covered shelters, open to the south, under which to protect themselves from bad weather. Plenty of good corn fodder or hay in winter, and grass when it comes, and as long as it lasts, will keep them whilst unbroke, in a healthy, growing condition, which is far better than keeping them very fat to force their growth beyond what is natural; for overgrown horses, like overgrown men, rarely, if ever, have hardihood, vigor, and activity in proportion to their size. In fact, very large horses are objectionable, for all purposes, except slow and heavy drafts. The gentling of colts should commence soon after they are foaled, and continue until they are backed. Frequent handling, occasional salting or feeding them out of your hand, and stroking their necks are all good practices. From two to three years old, they should be accustomed by degrees, to the saddle and bridle; a light snaffle is best. Thus treated, the breaking becomes so easy, that they will rarely play any tricks, and may be soon taught, even to stand fire, by shooting off a gun or pistol, for a few days, just as they commence eating. In a word, uniformly kind, gentle treatment by their master, will always make such good, docile, gentle horses, that they will often follow him, like his dog, and will manifest equal regard for his person.

All the general directions for the treatment of horses in England will suit quite as well for the horses of our own country. But the articles of food being somewhat different with us, I will now add a few remarks on that subject. In most of our states, the chief food for horses is Indian corn and the fodder thereof. Both are usually fed away in the most careless, extravagant, and wasteful manner—the corn being given in the ears, and the fodder in bundles, which are thrown untied into the horse-racks or on the ground. Much, then, is wasted by being trampled under foot, and so dirtied that the horse rejects it, whilst many of the grains of corn pass through his body undigested, and of course, render him no service whatever. He also loses all the benefit of the cobs, which he rarely eats when whole, although they make an excellent food, if ground up with the grain. This mode of feeding is much the most general, notwithstanding it has been indisputably proved by actual and numerous experiments, that to give the corn and cob ground together, which is called *cob-hominy*, and the fodder chopped in a cutting-box, not only saves more than enough to pay the extra expense of grinding and cutting, but actually keeps the horse in better condition than the same quantity of corn and fodder given in the usual way. Moreover, it is a cheaper food than any other of which grain, either whole or crushed, forms a part. Take oats for example, which are the most common, where corn is not used, and let us estimate the former at forty and the latter at sixty cents a bushel, which I think a fair general average in the states wherein corn is a staple crop. Now as only half the cob-hominy is grain, the mixture will cost only thirty cents a bushel, and is generally deemed fully equal in nutritive qualities to a bushel of oats. If these also be crushed, we must add about four cents to their cost, and the difference between the two kinds of ground food, (the chopped fodder being the same in both cases,) will be about 14 cents per bushel, in favor of cob-hominy. Suppose then, that one gallon, three times a day, is enough, as experience has proved it to be, for an ordinary sized horse, with eighteen or twenty bundles of fodder, the saving in one week, by feeding with cob-hominy, will be a fraction over thirty-six cents, or nearly nineteen dollars a year for each horse, which is the annual interest of rather more than $318. Yet not one in a hundred of us ever thinks of saving it! Few southern and western men who are "*well off*," (as the saying is,) keep less than three or four horses that do no farm work, and this they do at an additional yearly expense, when oats and unchopped fodder are their food, of 57 dollars for three, and 76 dollars for four horses, rather than be at the small trouble of having their fodder chopped, and their ears of corn ground into cob-hominy. Ten or twelve poor children might be annually schooled for that sum. For horses that are often hard ridden and rapidly traveled, oats are generally deemed better than corn, as less heating; but a greater quantity of them must be given, in the proportion of about one and a half gallons of oats to one of corn at each feed. Under such usage, green food should never be given if avoidable. But when the horse can rest for a few days some may be allowed him, in small quantities, by way of medicine. Any kind of grass that a horse will eat, may answer the purpose, but lucern and clover of the first cutting are deemed best—the second always salivates—an effect, by the way, for which no cause, I believe, has yet been discovered. Presupposing that a horse has a plenty of wholesome food and proper grooming, if you would give him a finer coat than these alone can produce, let half a pint of sound wheat or a small hand full of brown sugar be mixed with his food, about once in every six or eight days, for a few weeks, and the object will be attained far better than by blanketing, which always makes him more liable to take cold, when exposed to bad weather, as he sometimes must necessarily be. On long journeys, in hot weather, give your horse a double feed at night; in the morning travel 15 or 20 miles before you feed him again, then do it lightly and after he is perfectly cool. Give a few quarts of soft water both before and after his food, then resume your journey and go 15 or 20 miles farther. This will enable you to stop early every evening, without any night riding, and will give both yourself and your horse a long rest to recruit your strength. If your horse be sound, you may thus travel him hundreds of miles without danger of his failing.

Farm horses may be kept in good order at much less expense; for they may be fed, *when unemployed*, upon any of the roots which it is customary to give them in England. In addition to these, we have the pumpkin and its varieties, all of which are good food for horses, but the seeds should always be taken out, as they are powerfully diuretic. If such food be at first rejected, horses may soon be taught to eat it, by mixing a little salt with it, and offering them nothing else for a few days. To this should be added, as soon as they will eat such a mixture, from thirty to forty pounds of chopped provender, for every twenty-four hours, and this may be made either of well cured corn tops, blades, hay, wheat, oat, or rye straw, or chaff. Corn shucks, (which is the southern name for the covering of the ears,) answer well to mix when chopped up, with the roots or pumpkins; if they are salted as they are put up and kept dry. Another very good long forage peculiar to our country, consists of the various kinds of Indian pea-vines. These make excellent food for farm horses, if exposed to the sun until they are somewhat wilted, then stacked in alternate layers with the straw of either wheat, rye, or oats, and each layer sprinkled with salt, as they are stacked. Thus fed and protected from bad weather by warm shelters, open only to the south, and well covered with any kind of thatch, or corn tops or loose straw, farm horses may be kept healthy and in good order throughout the southern states, without their owners incurring the expense of wooden or brick stables for them. Stalls, however, should be made for them under the shelters, with divisions high and close enough to prevent their fighting, and in those they should be tied while eating. Their mangers or troughs should be wider and deeper, than when racks also are used, although *they* never should be, or lazy hostlers will be sure to avail themselves of them, if not closely watched. When put to constant farm work, horses should have only dry food, three times a day. It may consist either of bran, shorts, cob-hominy, ground rye, oats, broom corn, or oats mixed with chopped stuff in the proportions already mentioned—that is, about thirty-five pounds for horses of common size, and forty pounds for the largest. But after the grass is in plenty, and as long as it lasts, (if it does not salivate,) they may be turned out of nights and rest-days, although if your pastures are large, more time is lost every morning in catching them and getting ready for work, than would amply compensate, if spent in farm labor, for the expense of keeping them up, especially should you have any grass to give them a moderate quantity in lieu of a portion of their dry food. To fatten a horse rapidly, his fodder or hay should always be chopped and steamed, before it is mixed with the meal of either corn, oats, or rye, and as much should be given him, three times a day, as he will eat without leaving any. Give him also salt alone as often as he will eat it, and soft water at least thrice a day, but always with some meal of either of the above mentioned grains stirred up with it. A small quantity of ground Indian peas will add much to the nutritive properties of his food; and thus treated, with moderate daily exercise, in good weather, the process of fattening will soon be completed, provided the horse be in health at the commencement.

I fear that some of your readers perhaps, may deem the foregoing details relative to horses, more minute than they need be.

and possibly may think me somewhat officious in giving them. But should they be disposed thus to condemn me, I must beg them to recollect before they pass sentence, that all I have written on the subject has been communicated at the request of yourselves and one of your correspondents. It is true that this request was made to your contributors *generally*, and therefore it was not my *special business* to comply with it. Still I have ventured to make the attempt, and should it bring me into any scrape, I hereby give you and your North-Carolina friend fair notice that I shall call upon you both lustily for help. If either of you should want farther information in regard to horses, let me strongly recommend to you "*The Horse Book*," for in addition to all that I have said, you will find a prescription for all their diseases, and directions for correcting every fault which can be corrected.

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I will now proceed with my comments on other articles in your October number; and the first I shall notice is the communication from your enterprising correspondent, G. W., of Richmond, Va. But it is only to beg that he will not fail to report to his brother farmers the final result of the highly interesting experiment which he is now making. If he succeeds, as I have no doubt he will, a manure of vast value, one too which is easily formed, will be added to those we already possess.

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In your extract from the Buffalo Commercial Advertiser, relative to the Italian Spring Wheat, made by Mr. Erastus Skinner, it is said that "*he prepares his land for yielding 96 bushels of wheat to the acre, by growing ruta baga, at a net profit of $70.42 an acre.*" This is inconceivable without some explanation, for all who ever cultivated the ruta baga, know well that it is an exhausting crop, if taken off the land, and of course, that the more culture of it therein must lessen instead of increasing its productiveness.

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In the article signed A. M., and headed "*Protection against Drouth*," the author, (if I understand him,) maintains the opinion that frequent stirring the surface is rather a disadvantage; but in this he presupposes what will not necessarily happen, and this is, an exposure of a new surface every time the earth is stirred. In such supposition he is certainly wrong, if, instead of the plow, a well made single coulter be used: for this will stir the earth deeper than any plow, and yet leave the surface very nearly, if not quite the same as it was before the coultering. How often stirring, *he* would call *too frequent*, does not clearly appear, but I will venture to say, that in every kind of soil which is apt to bake and become hard, it should be frequent enough to prevent such effect.

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Your anonymous correspondent's notion about a National Agricultural School, "*favoring the aristocratic few*," seems to be rather an "ad captandum vulgus" bait, than a serious objection. And as to his suggestion that a better application of the Smithsonian Legacy would be to purchase "the back numbers of your Cultivator, or some equally valuable agricultural journal," for gratuitous distribution, I must move him to reconsider it, until he determines in his own mind, whether five hundred thousand men, or even five hundred of those who have been heretofore so self-conceited, or so niggardly as not already to have furnished themselves with any paper of the kind, would be prevailed upon to read one, even if it were offered to them as a present.

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I agree entirely with your correspondent, Mr. S. Stewart, in regard to what he calls "*crack articles*," about pet-calves of enormous size, or any other pets; and I verily think as he seems to do, that they occupy much more room in our agricultural papers than they deserve. Much better would it be for the interests of agriculture, if such writers would content themselves with making and communicating such accurate experiments as he has done, rather than so often to busy themselves in exciting the wonderment, and not unfrequently, the incredulity of your readers.

As Mr. Stewart seems fond of brevity in style, I will beg leave to recommend to him a new word which in three syllables expresses the whole business of planting, cultivating, and securing the potato crop. I picked it up some years ago in traveling through Connecticut, and was so struck with its multum in parvo character, that I forthwith added it to my vocabulary, and have used it ever since. This word is "*taturing*." I got it from a smart little fellow whom I was questioning about his education, as he drove me along in a carry-all. Upon asking him, if he went to school and when? he replied, "Yes, I go in winter time." "Well," said I, "what do you do during the rest of the year?" "Oh, sir," said he, "then I am out a taturing."

I earnestly hope Mr. Webster will adopt this word in the next edition of his excellent Dictionary, for I am very sure that the last edition contains not one which expresses more with the same number of letters. Yours with regard,

COMMENTATOR.

Wellington and Gore Agricultural Societies.

MESSRS. GAYLORD & TUCKER—The advantages of agricultural societies have become so well understood and so generally admitted, as to render it almost unnecessary to descant upon them; but I conceive that much of the interest which they have succeeded in awakening would again fall into a state of slumber, and many of their advantages be lost, if their proceedings were not published and disseminated: entertaining this idea, I shall feel much obliged if you will give insertion to the following account of the first exhibition of stock held by the agricultural society of the newly formed district of Wellington, which took place in this town on the 13th ultimo. It being generally known, that during the last few years, many importations of stock of various descriptions had been made from England by some of the spirited farmers of this neighborhood, it was anticipated that such an exhibition would take place as would not be easily equaled by any newly settled district in the Province, and I have much pleasure in stating that this anticipation was fully realized. The horses and mares were of much better quality than in my last communication to you I ventured to predict. The Short Horned cattle produced by Mr. Howitt, were above all praise; rarely, indeed, have I, in any country, seen such a choice herd exhibited as the property of one man; none of them escaped admiration, but one four years old heifer created astonishment. A Devon cow, the property of Mr. Jackson, was much admired. The show of grade and Canadian cattle and working oxen was good. The Leicester and South Down rams were fine specimens of those crack breeds, but the Leicester ewes exhibited by Mr. Jackson were of surpassing excellence. The grade Leicesters exhibited by Messrs. Thompson, Budd and Spiers afforded ample evidence of the great improvement that may be effected by using Leicester rams to the common Canadian ewes. The show of hogs was strikingly good, but being myself deeply interested in the breed of those animals it would, perhaps, be improper in me to make many comments; I may, however, be excused for saying that a Berkshire sow, the property of Mr. King, met with deserved admiration, as also did a sow of hers, which was got by an improved Yorkshire boar. You will, however, perceive by the subjoined list, that the premiums for the best boar and sow were awarded to Wainba and Purity, the property of J. and E. A. Harland.

On the day following the celebration at Guelph, I had the pleasure of attending an exhibition of stock by the agricultural society of the neighboring district of Gore, which was held at the flourishing village of Dundas; and I am happy in having an opportunity of publicly acknowledging my sense of the kind treatment and gratifying attention which I and my colleagues (acting as judges) received at the hands of the highly intelligent office-bearers of that society. The most prominent object in the show-yard was a Short Horned bull, (the property of John Wetenhall, Esq.) which appeared (to borrow the expression of an eminent breeder) to cover an acre of ground, and on examining him, his perfect symmetry was abundantly manifested, whilst a single grasp at his fine mellow hide, in which I could almost have folded myself, was sufficient to convince any one of his first rate feeding properties! He is certainly a superb animal, and will undoubtedly do much good in the neighborhood; indeed, from the large quantity of prime young stock which was exhibited, it was evident that the judicious breeders had not been slow to avail themselves of his services. Some fine Durham cows (bred by the Hon. Adam Ferguson from his imported stock) commanded great attention; one of them was purchased at a high price by my spirited and worthy neighbor, Mr. Howitt, who neglects no opportunity of adding to his already splendid stock. Some pretty specimens of Ayrshire cattle were exhibited and had their admirers. The show of sheep was rather small; a sprinkling of Leicesters was conspicuous amongst them—one ewe occupied much of my attention, her square form, beautiful fleece, prominent eyes, long thin ears, small muzzle, slender legs, and other prime qualities almost convinced me that she was descended from the flock of Sir Tatton Sykes of Yorkshire. The show of hogs was large; but the blood of the Alligators evidently flowed in the veins of most of them; I however, saw two good young pigs of a cross breed, and two others which it was easily to perceive were Berkshires; they were very pretty, but like all the Berkshires which it has hitherto been my fortune to meet with, rather small.

My letter has already reached a greater length than I intended that it should have done, but I cannot conclude it without offering my congratulations to you and your fellow-laborers of the Agricultural Press, upon the gratifying effects which your efforts to promote a better taste for the cultivation of the soil and the breeding of stock have produced and are producing. It is evident that improvements in both branches are progressing not only steadily but rapidly, and it is highly refreshing to hear in every quarter the denunciations against smut, chess, thistles, alligators, &c., which some people have already discovered may be got rid of by attention and good management; and the space which those noxious weeds, and certainly not innoxious brutes, have hitherto occupied, filled with plants and animals of a profitable description. With regard to book-read farmers, which it has long been the fashion to sneer at, I have to observe, that in the course of my experience, I do not remember having met with a good farmer that had an objection to add to his store of knowledge by reading an agricultural book or paper; and I never knew a slovenly or bad farmer that I did not think ought to have perused such works. As a proof that the Cultivator has at least no injurious effects upon its readers, I wish to call attention to the fact, that two-thirds of the winners of premiums at the show of cattle at this place are upon your list of subscribers, and the remainder are at least occasional readers.

I am, gent'n, your ob't serv't, J. HARLAND.

Guelph, Canada, Nov. 1, 1841.

List of Winners of Premiums at the Wellington District Agricultural Society's Cattle Show.

The best stallion for agricultural purposes—Mr. Parkinson's Young Mazeppa,	£2 10s.
The best and second best mare for do.—Mr. Jackson's Lucy,	2 10
Mr. Quarry's Darling,	1 5
The best filly foal—Mr. S. Owen's, by Prince Albert,	1 0
The best imported bull—Mr. Howitt's Comet, by Reformer,	2 10
The best imported cow—Mr. Howitt's Strawberry,	2 10
Bull, not being thorough bred—Mr. Armstrong's Brisk, by Adonis,	2 0
Cow, not being thorough bred—Mr. Parkinson's Fill Pail,	1 10
Two years old heifer, not thorough bred—Mr. Ambrose's Lovely, by Adonis,	1 0
One year old heifer, not thorough bred—Mr. Howitt's Miss Dyson,	1 0
The best and second best yoke of oxen—Mr. Tolton's,	2 10
Mr. Parker's,	1 5
Leicester ram—Mr. Broadfoot's, (bred by Mr. Jackson,)	2 0
Pair of imported Leicester ewes—Mr. Jackson's,	1 10
Imported South Down ram—Mr. Howitt's,	2 0
Pair of imported South Down ewes—Mr. Howitt's,	1 10
Three ewes, not being thorough bred—Mr. Thompson's,	1 0
Imported boar—Messrs. J. & E. A. Harland's Wamba,	2 0
Imported sow—Messrs. J. & E. A. Harland's Purity,	1 10
Sow, not being thorough bred—Mr. J. Horning's Susan,	1 0

Migration of the Swallow.

MESSRS. GAYLORD & TUCKER—In a communication from M. S. D. in the last Vol. of the Cultivator, under "Popular Errors," he says: "Another common error relates to the migration or hybernation of birds, particularly the barn swallow, or chimney swallow. It is supposed by many that these birds descend to the bottom of ponds, lakes, &c., in the mud of which they lie torpid during the winter, as it is well known the toad, frog and lizzard do, and as the bat does in caves or other dark recesses. These birds migrate, as their presence in the equatorial regions, during their absence from ours, conclusively proves; and the idea of their being torpid has been countenanced by the fact, that the flight of most migratory birds takes place during the night."

I have thought proper to state such facts as I have at hand respecting the migration of swallows. The barn swallow, I presume, seeks a warm clime in the fall, but the black martin and house swallow, at least a portion of them, would place me according to M. S. D. among the "popular errors" of the day.

The following accounts, which I take from Samuel Williams' History of Vermont, transcired, a part of them, in towns adjoining mine. He says: "The black martin (the swallow that builds their nests under the eaves of barns and houses) arrive the latest, and disappear the soonest of any of the swallows; but they do not seem to be properly birds of passage. At Danby the inhabitants report that some of them were taken out of a pond in that town some years ago; among the mud and roots of the pond-lily a man threw out several swallows enclosed in the mud, alive, but in a torpid state." He says, "that it has been doubted by some able naturalists whether it is possible for the swallow to live in such a situation; but I saw an instance which puts the possibility of the fact beyond a doubt. About the year 1760, two men were digging in the salt marsh at Cambridge, in Massachusetts on the banks of Charles river; about two feet below the surface of the ground, they dug up a swallow, wholly surrounded and covered with mud. The swallow was in a torpid state, but being held in their hands it revived in about half an hour. The place where this swallow was dug up was every day covered with salt water, at every high tide was four or five feet deep. This swallow was found in the month of February.

"The species called the chimney or house swallow has been found during the winter in hollow trees. At Middlebury there was a large hollow elm, called by the inhabitants the swallow-tree. From a man who lived for several years within twenty rods of it, I procured this information. He always thought the swallows tarried in the tree through the winter, and avoided cutting it down on that account. About the first of May the swallows came out in large numbers about the middle of the day and soon returned. As the weather grew warmer they came out in the morning with a loud noise and soon dispersed. About half an hour before sun-down they returned in millions, circulating two or three times round the tree, and then descending like a stream into a hole about sixty feet from the ground. In November, 1791, the top of this tree was blown down twenty feet below where the swallows entered. There has been no appearance of the swallows since.

"Another of these swallow-trees was at Bridport. The swallows were first observed to come out of the tree in the spring about the time the leaves first began to appear on the trees, and about the middle of September they were seen entering the tree for the last time.

"The following account from Nathan Rumsey, Esq. of Hubbardton, is more conclusive: 'Sometime in the month of March, A. D. 1786, when the snow was deep on the ground, I was making sugar in the town of Hubbardton with the assistance of some boys, who informed me that they had discovered a large number of birds flying out from a tree; I went to the tree and found that the birds were swallows of the chimney kind. For several days I observed the swallows going out and into a hollow of this large elm fifty or sixty feet from the ground. I chopped a hole in the tree, from whence I could see through to their place of entrance, and found that they extended from this hole, from fifty or sixty feet, near down to the ground, and appeared to be sticking to the tree as thick as they could be placed; a considerable part of them appeared to be in a torpid state.'"

In this town, (Weybridge,) about one and a half miles from my residence, a very large elm stood on a farm belonging to Samuel James,* Esq., which has been visited by the house swallow for many years. A little before sun-down I have seen immense numbers of them through the summer months directing their course towards this tree; they would form several circular motions, and then descend into the hole of this hollow tree, which was about the size of a barrel where the tree was broke off, about sixty-five feet from the ground, and bowed over to the east a few feet of the top. Mr. James says that he had frequently seen swallows about this tree going out and in about noonday in warm weather in the spring, but did not offer to go any great distance from the tree. And as warm weather advanced, they were seen by millions to rush out of this tree about half an hour before sun-rise, and after taking a circuitous motion, they would disperse in all directions. Through their breeding season they did not appear so plenty as they did in the spring and fall. About seven years since, some racoons had taken refuge in this tree about the first of September, and it was cut down.

Mr. James says he has no doubt but the swallows remained in this tree through the winter. He was present at the time it was cut, and states that the cavity, which was four feet diameter at the butt, was completely filled to the height of ten feet with dung, bones and feathers.

The idea that most birds migrate by night I very much doubt. The barn and chimney swallow, I know, cannot see as well as common barn fowls in the night. Birds, without collecting in flocks, may migrate through the day time without being noticed by the common observer. The crows for instance, may be seen about sun-down all going one direction through the season to roost, where they congregate in large numbers in some retired swamp, or thicket of evergreens, and early in the morning they disperse in all directions; and I dare say that many readers of this article have never noticed the fact, which they might do by slight observation.

As various opinions have been formed respecting the migration of birds, and especially the swallow, which, as has been stated, exist in a torpid state through the winter, the absurdity of which has been refuted by able naturalists; I hope, therefore, if *wrong* to be *righted*; and if other of your numerous readers can support me in the above facts, I shall hope to hear from them. S. W. JEWETT.

Salmagundi—No. 2.

I avail myself of an inclement day, Messrs. Editors, and have prepared a chapter corresponding with my caption. Permit me, although with some regret to myself, to refer again to

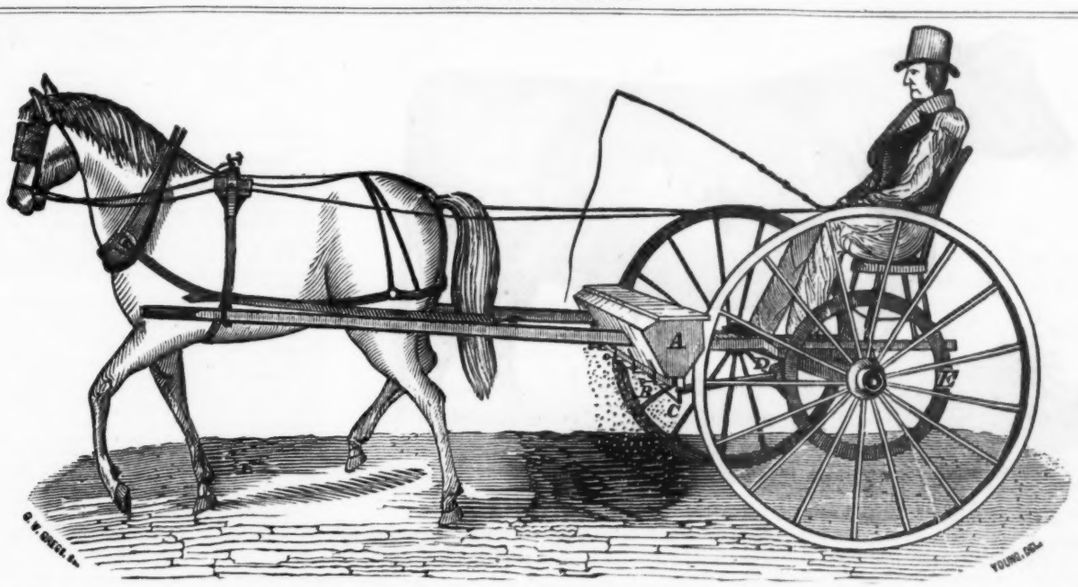
Lamb's Tails.

Not a very interesting subject truly, but made a little important by Mr. Bliss of Connecticut, in the October number. On a former occasion I remarked, in passing, as follows: "After this the tails are docked, and if you wish to save yourselves the trouble of tagging often during the year, cut them off as short as possible." My own experience has sanctioned this on the score of necessity and *humanity*: and I did not dream that any farmer having the character of tidiness, could attempt to controvert it. But Mr. Bliss, it seems, is *eccentric* enough—for that is the mildest term I can use—to advocate natural tails for sheep, and introduces flowing horse tails, and "handsome curled" pig's tails, by way of illustration and argument. A moment's reflection, I think, would have satisfied the gentleman that his comparisons are not apposite. The horse for instance, when well, never discharges excrement when in a lying posture; whereas the sheep will, whether ill or well; and hence, if the tail is left long, the excrement adheres, and if the weather is warm, it attracts the maggot fly; the rest must not be told. Is it not, therefore, an act of humanity to divest the animal of an appendage which is often the means of destroying its life? I could enforce this by the citation of abundance of facts, if I deemed it of sufficient importance. As to the question of *taste*, between long and short tails, in reference to sheep, Mr. Bliss would find himself in a lean minority were he to put the question to the great mass of farmers. Off with their tails—so much for nuisances—will, at all events, continue to be my motto.

Blacklock's Treatise on Sheep.

I anticipated your good advice, Messrs. Editors, and supplied myself some months since with a copy of this valuable work. I have read the whole of it with considerable attention, and most cheerfully accord with you in all that you have said in its praise. Youatt's History of Sheep is as correct a guide, and abounds with more minute and varied information. Both, however, should have a place in the library of every wool-grower. It is my present intention, in the next volume of the Cultivator, to draw largely from these standard works—in addition to my own experience in sheep husbandry, for the benefit of that numerous class of your subscribers, who either will not or cannot purchase either. I did not now intend to advert them, but to the queries propounded in the last number of the Cultivator, by Mr. J. N. Smith, on the subject of "South Downs," induced me to turn to these works and answer most of them in a general way. Blacklock says, "the South Down, like the Ryland, are from the delicacy of their constitutions, unadapted for bleak situations, but sufficiently hardy and active for a low country; their average weight is from 15 lbs. to 18 lbs. a quarter; that of the fleece, which is very short and *fine*, being from 2½ to 3 lbs." Youatt says, "The average weight of the fleece of a South Down hill sheep was stated by Mr. Lubbock, in 1800, to be 2 lbs., it is now increased to 3 lbs. The fleece of the low land sheep, that used to be 3 lbs. is now 3½, or even 4 lbs. This is the natural consequence of the different mode of feeding, and the larger size of the animal. The fibre is the six hundredth part of an inch in diameter; the Merino about seven hundred

* Brother to Dr. John and Edwin James, who formerly resided at Albany.



and forty, and the Saxony being but the eight hundred an fortieth part. The serrations are only 2080 to an inch; while in the Saxony wool 2720 were observed in the same space. This greater comparative bulk of the fibre, and paucity of serrations, will account for the harshness and want of felting property which have been considered as defects in this wool. The brittleness of the fibre is perhaps to be attributed chiefly to the soil." After speaking of some modifications of the fleece within a few years, he says—"the South Down sheep master justly repudiates the charge of its deterioration; *it has only changed its character;* it has become a good combing wool, instead of an inferior carding one." As regards crossing—"even the cross with the Leicesters was a failure, and the promised advantages to be derived from a cross with the Merinoes were delusive."

I will transcribe further from Blacklock, which will prove what the world in general already knows, that the South Down is an invaluabe sheep for mutton. "Their mutton is fine in the grain and of an excellent flavor. They are mostly found in in Sussex, on dry chalky downs producing short fine herbage, and arrive early at maturity, in which respect they are equal to the Cheviot, though inferior to them in quantity of tallow. Formerly they would not take on fat until four years old; now they are always at market when about two years of age, and many are killed before that period."

As regards being less subject to *scab* than Merinoes. I have no doubt of it, for the reason that the fleece is not as compact, and therefore admitting more freely the air which conduces to a healthy action of the skin. Whether less liable to foot-rot than other breeds, I am unable to decide; but am inclined to think not, as there cannot be any essential difference in the conformation of the hoof and adjacent parts; others perhaps, can speak with more certainty.

"Don't Sell your Ashes."

I have made a fair experiment with leached and unleached ashes during the present year, and found your remarks on the subject true to the letter; and shall take your advice, and hereafter not sell my ashes. The experiment was on a small scale it is true, but nevertheless sufficient. I measured about one square rod of elevated ground in one of my old meadows, staked it in order to know exactly the spot, and sowed about two quarts of leached ashes. The quantity of grass was increased certainly one-half, if not more. I also measured another piece of ground of similar size, in the same field, rather low and wet, and the soil evidently sour from the moss on the surface, and sowed one quart of *unleached* ashes; the increase of grass was similar to the above.

Like plaster, ashes act as a *stimulative manure*, and should never be parted with by any farmer, at least not for the paltry price of one shilling a bushel. L. A. MORRELL.

Lansing, Tompkins Co. 1841.

A Suggestion.

MESSRS. GAYLORD & TUCKER—I much like the suggestion that was made some time since, that the Cultivator be furnished with the names of the officers of the various agricultural societies. I would amend the above suggestion by a request, that the names of all the officers of the various county societies be published, with the places of their residence, as it would furnish great facilities for interchange of opinions. I am led to make this request, as I wished to correspond with officers of the different societies, but was prevented from doing so for the reason, I did not know their post-offices; and on looking over the Cultivator and Genesee Farmer for this year, I could find only about twenty-five societies that had reported their organization at all, and only about one-half of that number have given the As there is a general wish to interchange views with each other, let one and all comply with the request, and I can assure you places of residence of their officers. Now this should not be so. that all will receive great benefit thereby. J. B. D.

Auburn, Nov. 16, 1841.

A Large Calf.

MESSRS. EDITORS—Mr. Hendley Kissinger, a respectable farmer of Pike county, Missouri, has a bull calf which he raised in said county, of the Durham and Patton stock, which weighed, at the age of five months and nine days, five hundred and seventy-four pounds gross. Color, deep cherry red.

JAMES W. BOOTH.

Clarksville, Mo., October 18, 1841.

QUERE.—A friend of mine inquires, whether there has ever been any trial of the comparative product of butter from fresh milk and that which has stood 24 or 48 hours? If the quantity is as great and the quality as good, I think the saving would be very great. A. V. D.

Clayton county, Iowa Territory, 1841

HATCH'S SOWING MACHINE—(Fig. 87.)

A machine, of which the above engraving gives a correct representation, designed for sowing grains of all kinds, grass seeds, plaster, &c., invented by JESUS HATCH of Rochester, N. Y., was exhibited at the State Fair at Syracuse, and received a premium of $15, as the best machine for such purposes. From what we hear of it, from those who have used it, we are inclined to think, with the New Genesee Farmer, from which we transcribe the annexed description of it, that it will prove one of the most useful labor-saving machines that has recently been brought into use. It "consists of a pair of wheels of the size of ordinary carriage wheels; an axeltree 10 feet long, with a pair of shafts for the horse to draw by Just in front of the wheels, and across the shafts is the hopper *A*, 10 feet long, and capable of holding 3 or 4 bushels of grain. At the bottom of the hopper is a slide or agitator one inch square, faced with iron and having teeth on the inside, by the motion of which the grain is shaken out. The width of the crevice, and the consequent discharge of the seed, can be increased or diminished by means of set screws, as shown at *B*. When the machine is in operation a rapid vibratory motion is given to the agitator by means of a small rod and crank *C*, attached to one end of a small shaft 15 inches long, on the other end of which is a pinion wheel *D*, with cogs or teeth meshing into the master wheel *E*. The master wheel is bolted on to the inside of the spokes of the nigh wheel of the machine. It is 2 feet in diameter, and one revolution of it gives eight revolutions to the pinion wheel and shaft. On the top of the back part of the machine is a seat for the driver. A small cord is attached to the end of the pinion shaft, and reaches to the seat of the driver, by means of which he can readily put the machine out of gear, so as to stop the discharge of seed at any time when desired. The machine will sow all kinds of grain, grass seed and plaster, at any desired rate from 4 quarts to as many bushels per acre. It is easily managed, and not liable to get out of order. A man or a smart boy with a horse, can sow from twenty to twenty-five acres with it in a day.

"The inventor and proprietor of this machine has spent several years in testing and improving it, and he now introduces it to the public with the utmost assurance that it will fully meet the wants and expectations of the community. It is well known that sowing is one of the most difficult and laborious operations of the farmer, and one which but few men can perform properly. Hence arises the need of a machine like this—one that will perform the work correctly, expeditiously, and with ease. All who have used this machine, agree in declaring that it answers the purpose *exactly*; and if we are not mistaken, it will in a few years be as uncommon to see a farmer sowing grain by hand, as it now is to see one thrashing with a flail."

The machine is manufactured at Rochester, N. Y., by the patentee, who offers the rights for counties or states to enterprising mechanics on favorable terms. Letters to be addressed to Mr. Hatch, as above.

National Agricultural Society.

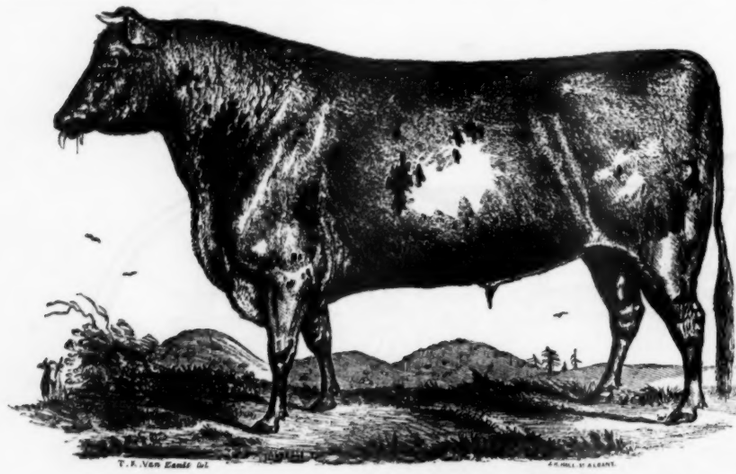
MESSRS. EDITORS—I do not call the friends of a National Agricultural Society fools, neither do I wish to impute to them any notion they do not entertain; but I do believe they entertain the notion of establishing a National Agricultural Society, a National School, and a National Experimental Farm; and of petitioning Congress for the Smithsonian legacy to establish them. Now, Messrs. Editors, as to the Smithsonian legacy, I can see no reason why the farmers, as a class, have any more right to claim it than any other class. Mr. Garnett and others say the farmer ought to have it because there is no profession which requires a more general knowledge than agriculture. I think that the different professions, priests, lawyers and doctors, mechanics, artists, or manufacturers, might claim it for the same reasons. If I understand the Smithsonian legacy right, it was left to the government towards establishing a National University; that the philanthropic donor had no intention of bequeathing it to any particular class for their sole benefit; therefore, if the farmer should obtain it of Congress by log-rolling, lobbying, petitioning or any other means, it would be unjust, as much so as to obtain a half million of the revenue. My opinion is that government is constituted for the protection of all, for the favoring of none; therefore I cannot see what right government has to tax me to pay my neighbor a premium because he has reared a bigger bull calf than I have. Since I received the last number of the Cultivator, I have carefully perused all the communications of Messrs. Garnett, Robinson and Gordon, as well as your own, on the subject of a National Agricultural Society, and cannot conjure up in my brain any thing much different from what I did before. It is described as something from which great undefined blessings are to flow, and great honors are to be obtained, far exceeding the honors of congressmen. It is also said it will serve as a kind of bond to bind our grand confederacy together, although Mr. Garnett says, should the scheme be generally approved, members enough, and more than enough, will be found in the States most convenient to the place of meeting to constitute a numerous association. Well, suppose that this numerous association is collected at Washington, either from the remotest extremes of the grand confederacy, or from one or two of the adjoining States; what then? Why, an Agricultural School, with an Experimental Farm attached to it, is to be established. What is to be taught, or who are to be taught, at this school I know not; and as for one Experimental Farm for such a diversified soil and climate as there is in the United States, I cannot understand it. Friend Robinson thinks the scheme is like a complicated piece of machinery, very difficult to start, but of great use when started. Now I will admit it appears very complicated, and as he is comparing it to machinery, I must take the liberty of comparing it to one of our double geared thunder-shower saw-mills, that go to kill, whilst the shower lasts, but stops for the want of water when the shower is over. So it will be with this grand scheme. As long as government will furnish funds, and riches and honors can be held out as inducements, it will go, and no longer.

I will say no more on their scheme, but simply propose another, which is this: There shall be formed a great National Agricultural Society, composed of all the farmers in the United States and Territories. There shall be no president, vice-presidents, secretaries or treasurer to manage the affairs, but every member shall manage his own affairs. There shall be a great National Agricultural School, and every farm shall be an experimental farm attached to it; every member of this society shall have a premium in exact proportion to his skill and industry; that is, he shall have all he produces on his farm, and shall not be obliged to give his neighbor a part because he was more skillful than himself. It is recommended that every member of this society take the Cultivator, or some other good agricultural paper; and when any member makes any valuable discovery in the art of farming, he shall communicate it to his brother members through the medium of those papers. I well remember the saying of Dr. Franklin to Thomas Paine, that he who spits against the wind spits in his own face, when I say any thing against the fashionable agricultural societies of these days, but I do sincerely believe there is more humbugery about them than any real good. F. BURT.

Importance of Ag. Journals to the Farmer.

MESSRS. EDITORS—I have been a constant reader of your Cultivator for the year that is past, and I am convinced it does produce the effect for which it was established—to improve the mind as well as the soil. Such publications infuse new life and energy into the farmer, and excite him to intelligent activity in his business. The time has past when agriculture was considered a low and vulgar calling; yet there are still some who call themselves farmers who refuse to take an agricultural paper, and the reason they give is, that they can plant corn and potatoes without reading; they don't believe in "book farming" at all. Now I contend that every farmer can afford to take an agricultural paper, and every farmer who refuses to take one is behind the age and blind to his own interest. In fact, the great reason why agriculture has been kept down so long, is, that the farmers themselves have been too negligent, they have been too ignorant, they have not read and informed themselves, they have acted as though they thought theirs was a low calling. If the occupation of the farmer is a degraded one, how is it that some of the greatest and ablest men this country has produced are or have been farmers? Such men for instance as Clay, Jackson, Webster, Van Buren, Hill, and the late Judge Buel, and many others that might be named, by their conduct prove they do not consider the calling of a farmer a disgrace. They are men who unite science with practice, and the results they give the public, for the benefit of their fellow-farmers. If a farmer has a liberal education, so much the better, if it gives him the means of greater influence. To be neat and thrifty farmers, we must be intelligent ones. Some farmers seem to labor under the great mistake they have done all that is required of them, when they have labored from week to week, and month to month, without giving one hour to mental improvement.

And now let me say to every farmer who does not take an agricultural paper, send in your subscription for some such journal at once, and my word for it, you will never be sorry you have done it. What farmer is there among us who would not like to spend an hour with such men as James M. Garnett, A. B. Allen, Solon Robinson, C. N. Bement, and many others? Yet the subscriber to the Cultivator meets these and a host of others, scarcely less celebrated, monthly, and enjoys the rich results of their skill, experience, and observation. The observation of Mr. Bement is doubtless correct, "that in traveling through the country he can tell whether a man reads an agricultural journal or not, by looking at his farm gates, out buildings, piggery," &c. Depend upon it, Messrs. Editors, there is something in the outside show which a farmer makes about his premises. It speaks the mind and the man. I. DURAND



MR. BEMENT'S SHORT HORN BULL ASTORIA.—[Fig. 68.]

THE subject of the above cut is the "Improved Durham Short Horned Bull" Astoria, bred by, and the property of, C. N. BEMENT, of Three Hills Farm, Albany. It was cut on wood by Mr. Hall, of this city, from a painting from life by T. R. Van Zandt, also of this city, a young artist of great promise, in the line of animal painting; and I avail myself of the present opportunity of recommending him to the notice of gentlemen who feel desirous of preserving their animals on *canvas*, and encouraging a modest, unassuming young artist, whose terms are moderate, and whose skill in delineation, is admitted by all who have seen his portraits.

The painting from which this was taken is acknowledged by all who have seen the animal, to be a good and faithful portrait and not flattered; but on transferring it to the block, the head has been diminished and placed a little too high, which, however, is not much exaggerated, when animated by the appearance of other cattle. The ham is also too full, the back too straight, and he is cut up too high in the flank.

It would not be proper for me to say much in favor of my own property; nor is it expected that any animal should be so perfect as to merit entire approval; but the owner would be perfectly satisfied to submit him to a comparison, taking him in all points, with any other bull of the same age, and reared under the same circumstances, having never been pampered or fed high on grain. He has no very extraordinary point to catch the eye, but is remarkably even and symmetrical.

Astoria, when painted, was two years and eleven months old, and measured at the time, from the centre of his horns to the root of his tail, seven feet and three inches—girth around his heart, six feet and nine inches—around his flank, six feet seven inches—four feet seven inches high, and raised the beam with 1510 pounds in ordinary working condition. I am well aware that his measurement or weight is nothing extraordinary, unless his treatment and keeping is taken into consideration; for it is well known that by forcing with high feed, animals may be made to measure and weigh much more, and it is equally well known that animals so forced, particularly bulls, often become impotent and useless.

Although he is full and ripe in all his points, he is not yet in his prime; still he possesses the essentials of *good handling*—his skin being thin and elastic—his hair soft and silky. His color white, inclining to a cream, interspersed with dark red spots on his neck and body. He is deep in the fore quarter, as you will perceive by the portrait, well filled up behind the shoulders, a point sometimes deficient in animals of this breed—broad across the hips and loin—flank well let down—body round and ribs arching—legs neither too large or too small, but well proportioned. He has more vigor and stamina than any other bull I have ever owned; but after all, the best evidence of his value is in his stock, which he stamps with the same gay, upheaded appearance as himself; giving them small beautiful heads, with bright, full, and prominent eyes. I have now a yearling bull of his get, more promising than his sire was at the same age, and one bull and six heifer calves, sired by him, which are acknowledged by all who have seen them, to be very beautiful animals, possessing in an eminent degree that gay and lively appearance of their sire.

PEDIGREE.—Astoria was calved July 14, 1838, got by Ajax, (bred by Gen. S. Van Rensselaer, and got by Washington,) dam Delia, by Carlos, 1787,—g. dam Dulcibella, (bred by Mr. Whitaker,) by Frederick, 1060—g. g. dam Delicia by Major, 2252—g. g. g. dam by Comus 1662—g. g. g. g. dam by Marske 413—g. g. g. g. g. dam by Wetherell's ——

This bull was exhibited at the late Fair of the N. Y. State Agricultural Society, in the first class, and received a premium of eight dollars, and excited great attention by the numerous visitors on the ground, and by many considered the best bull exhibited.

C. N. BEMENT.

Means of Promoting a Knowledge of Meteorology.

[The communication from "E. S." has been a long time waiting for a place, and we are now only able to give a part of it. For some previous remarks on the subject, the reader is referred to Vol. 7, p. 97.]

The various sciences which have engaged the attention of mankind have been almost entirely originated by the efforts and discoveries of individuals, and by the same means, brought to various degrees of perfection and consequent usefulness, but where they have been made greatly or extensively useful, it has seldom been by unassisted individual exertion. Indeed it could hardly be expected that persons should exert the faculties of the mind, and of the body in some cases, to any great degree, with no other prospect of remuneration, than that of fame, or the gratification of their curiosity, neither of which, though in some cases they have effected, and may still effect much, can be expected to produce that energy, (much less as respects some of the sciences, especially this one,) that simultaneousness of action, so necessary to their successful prosecution. To what, therefore, shall we look for the means of producing the necessary co-operation and accuracy?

This may be best answered by referring to those sciences in which great and useful improvements have been effected, and inquiring into the means by which those improvements were brought about.

Astronomy had been cultivated from very remote antiquity, and by a great number of persons, some of wealth and power, but (even among such) it was usually privately, or as a matter of curiosity, and not as a matter of necessity, or of great or general interest, to any great extent, and was consequently pursued in quite a desultory manner; hence, though considerable progress was made, yet at the revival of learning in the 15th and 16th centuries it had attained but little of that practical accuracy so necessary to render efficient aid in the extended voyages that began to be undertaken. As commerce still increased, the want of greater certainty in ascertaining the place of a ship at sea, and especially of a method of determining the longitude, attracted the attention of various European governments, especially of Great Britain, and in the latter produced the Royal Observatory at Greenwich, and similar establishments in France and elsewhere. The benefits that have accrued to commerce from these, scarcely need comment here. Suffice it to say they are intimately connected with the rapid progress which it has made in modern times. And similar are the good effects of the patronage which the French government extended to chemistry, when, cut off from their accustomed supplies of saltpeter and sugar, by the naval ascendancy of Great Britain, they sought to produce them within their own territory, and by its aid, as is well known, completely succeeded. But, (among others which might be adduced,) we have in our own country an instance which is scarcely less conclusive; I allude to the geological survey, the benefits arising from which are so great, and beginning to be so well appreciated that the mention of them is deemed a good confirmation of the principle involved in the other instances just given, that though private investigations may do much, yet to bring about that perfection in sciences of public utility, which will enable them to give extensive or important aid in the arts, the more efficient aid of government must be given.

But what probability is there that governments will be induced to give aid and encouragement to this science?

Judging from past events we should say that when individuals by their private efforts give decisive evidence that the improvement and perfecting of meteorology would be really practicable and useful, governments would not be long in extending their aid, upon a due representation of the subject to them;—and though in a general way it may be said that a republican government is more reserved and shy of new schemes than others, yet the prompt and almost simultaneous action of most of our states upon the subject of geological surveys, is an abundant earnest of the encouragement which would be given to this science under suitable circumstances.

But notwithstanding the small advancement that has hitherto been made in meteorology, at least so far as refers to exhibiting decisive proof of its practical utility, (though it must be admitted that some facts of importance have been ascertained,) we have very encouraging evidence of a disposition to promote this science. The following is taken from a Philadelphia paper, July 6, 1839.

"*The cause of storms*, it appears, is beginning seriously to engage philosophical attention. Lord Glenelg, the Colonial Secretary of the British Government, has sent instructions to various agents of the government resident abroad, captains of posts, harbor-masters, and keepers of light-houses, to keep journals of the weather, on the principle of log-books of ships, to note the height of the barometer, and enter all meteorological observations worthy of notice. As the object in instituting these inquiries is the advancement of knowledge and science generally, the governors of the several British colonies are directed to consider how far it may be in their power to obtain useful information bearing on the subject from countries adjoining to their governments in the possession of foreign powers, or how far it may be useful to the study of meteorology, to exchange the observations made within their governments for those of other countries in the neighborhood."

Thus it appears that this greatest of the nations of the old world, after having obtained such lasting and beneficial results through the policy which has there been so well persevered in, of encouraging every science which there was reason to believe would be beneficial to society, is not disposed to abandon one which has been productive of so much good, not to itself alone, but, it is but just to say, to other nations, and particularly to ours. The plan adopted, also, appears highly judicious, particularly on account of the provision to obtain observations over so large a part of the habitable globe as the widely separated dominions of the British Empire, and the proposed plan of exchanging observations with other governments will enable them to do; and not less valuable is the provision to obtain observations on the natural phenomena, which appear to have been but little attended to hitherto, but without which it appears to the writer, (and the opinion is corroborated by the example of the other natural sciences,) that results of practical utility to "the plowman, the mariner, and the fisherman," will not be obtained.

If such is the vigor with which the British government is about to prosecute this science, shall the United States, which have already reaped such advantages from sciences promoted by other nations, be backward in lending their aid in the promotion of this, in which another has so fairly led the way, and in which they as the second commercial nation on the globe, and still more so, on account of their vast and rapidly increasing agriculture, have such a deep interest? It affords me pleasure to say, that a disposition has already been evinced, in that quarter where it is most likely to effect the object in view, of aiding effectually the advancement of meteorology. The following paragraph, which is taken from another Philadelphia paper, dated July 11, 1840, will doubtless be gratifying to those who have not already been made acquainted with the information it contains, and who desire the promotion of this science.

"*Philosophical observations.*—Mr. Adams from a select committee, reported to the House this day, the following resolution:

"*Resolved*, That the sum of twenty thousand dollars ought to be appropriated for the establishment of five several stations, at suitable distances from each other, for making observations of terrestrial magnetism and meteorology, conformably to the invitation from the Royal Society of Great Britain, to the American Philosophical Society at Philadelphia, and other learned societies in the United States; and that the said sum should be placed under the direction and at the disposal of the Secretary of War, for the fulfillment of those purposes, he to account for the expenditures thus authorized, to the Treasury of the United States."

The foregoing paragraph which was a detached one, was not accompanied with any date, except the date of the newspaper, which of course cannot be the day mentioned in it; it is, however, to be inferred that the report was made during the last session of Congress; and it appears evident, (though I have no other information on that point, than what is contained in those two paragraphs,) that it was intended thereby to co-operate in the plan proposed by the British government, above mentioned. Be this as it may, the proposed measure, (for I have not heard that the resolution was adopted,) is a wise, and even liberal one, in this incipient stage of the science, and reflects much credit on its illustrious proposer, though doubtless incomparably small in proportion to the advantages which would accrue to the farmer and mariner, and indeed, in a greater or less degree, to almost every citizen, if this subject receives the attention which it merits. But lest, for the want of a proper degree of interest being manifested in the subject by those whom it most concerns, even the proposed aid should be withheld, let us, farmers especially, take the matter in hand individually, yet co-operatively, and there is but little doubt that by making observations on the weather, of the proper kind, in every part of our country, and duly comparing them, we shall be enabled to convince the most incredulous of the advantages of, ensure the aid of government in, and when that is obtained, greatly assist and hasten the accomplishment of its designs for the promotion of meteorology.

B. S.

Montgomery county, Penn., Dec. 31, 1840.

Traveling Memoranda—No. 5.

Baltimore, Sep. 9, 1841

EDITORS OF CULTIVATOR—Once more I am ready to make another memoranda for the perusal of the readers of the Cultivator. How I could dilate upon the subject of the great change that 40 years have wrought upon the face of Ohio. How the dense forest has given way before the hand of persevering industry, and laid open immense fields of the richest of soil to cultivation, and increase of wealth and happiness. But notwithstanding the splendid mansion now occupies the site of the lowly log cabin, I cannot believe that there is more real enjoyment within, than the owner used to feel while gathered around the broad blazing fire of the settler's new home. It is the contented and cheerful mind that finds enjoyment in whatever situation his lot may chance to be cast.

What a wild uncultivated waste was this fine region 40 years ago. Even 15 years since, how we used to toil along the muddy roads of Ohio, the stage often to the axles in the soft, wet soil, and the passengers not unfrequently called upon to lend the strength of Hercules to lift the vehicle into an upright position. Now the road from Cincinnati to Columbus is nearly all Macadamized, and from thence, or rather from Springfield to Wheeling, we roll in ease and comfort, at great speed, along the great National road that was designed to connect the east with the *far* west. As an evidence that the roads are not quite impassable, I have only to state that I took the "fast mail" at 11 o'clock on Friday at Cincinnati, and on Monday night I slept at the "relay house," nine miles from Baltimore, traveling by stage all the way, except the short distance from Frederick to the junction of the Washington City Road.

The passes of the almost impassable Alleghanies, have been made passable, and are daily passed by a host of passengers with great speed, if not great safety; for the truth is, that fear of accident does not seem to be a part of the composition of the drivers over these dangerous mountain roads, for they crack the whip and rattle down the long declivities much after the manner that we are all heedlessly rattling through the world. We are all sure to reach the end of the road, but not always "right side up with care."

It was with no small degree of interest that I looked upon these hills piled on hills. For 16 years I had been treading the fertile plains of the west, and in all that time had not seen an eminence worthy of the name of mountain. Here were old acquaintance that should never be forget. And here upon every little spot of level ground was perched the hut of a hardy mountaineer, as blythe, as happy and contented as him who could count his thousands of acres of far more fertile and feasible soil of the west. I could not but ask, "why do you toil here upon these rocks and hills?" and yet perhaps I should do wrong to urge them to give up situations, with which they are content, for the more promising plains that spread out invitingly and uncultivated away beyond the "beautiful river."

Of my doings at Washington in regard to the contemplated National Society, you are acquainted. Of the state of agricultural improvement around the capital of our country, I cannot speak encouragingly. In fact, to me, the quality of the soil presents a very forbidding aspect. By far the greatest portion of it looks to me as though it would cost more than it would come to, to put it into a good state of cultivation. The "skinning system" seems to have been thoroughly practiced here, where originally there was but little to skin, until the fertility has been so completely skinned from the soil, that I should think the present cultivators would find some difficulty in raising enough to keep their own skins foll.

But there are some noble and spirited friends of agricultural improvement in and around Washington, among whom Mr. Ellsworth stands foremost. While I was there, he was engaged in an experiment of making a cheap machine for making a ditch and bank fence, of which the public will hereafter hear something. He is constant and unceasing in his efforts to promote the agricultural interest of the United States, and has partially succeeded in converting the Patent office into an agricultural bureau. He has purchased a few acres of the "vacant lots," which abound upon the original great plat of this *to be* great city, for the purpose of trying different kinds of seeds, and making experiments and illustrations in farming, for the benefit of the community. His plan of distributing seeds throughout the country has been of great advantage to the country, at small cost to the government. Every friend of the measure should feel it a duty to forward to him for distribution, a small quantity of every rare seed that he may possess. And I hope that every friend who attends the first meeting of the National Agricultural Society on the 15th Dec. next, will at least take his pockets full of such seeds as he may happen to possess, for the purpose of exchange.

Washington city, like a great many other great things in this great country, was begun on too great a scale. I judge from

appearances, that the citizens are not strong advocates of "internal improvements," so far as their own corporation is concerned.

The public buildings are the great, I may say the only ornaments of Washington. To me the Patent office possesses the greatest interest. Independent of the models, nearly all of which that were burnt having been replaced, there is the great "Hall of Manufactures," in which it is designed to exhibit specimens of all kinds of manufactures of the United States, forming one of the most interesting collections in the country. It is also intended to exhibit specimens of every known kind of agricultural implement, from the earliest ages to this time; also a collection of all kinds of grains and seeds.

The Smithsonian collection of curiosities, and also that of the exploring expedition, together with the gallery of Indian portraits, are now exhibited in this building, forming in the whole, an extensive free museum.

From Washington to Baltimore, along the line of the railroad, the land is mostly miserably poor and uncultivated. It is surprising to see what a mass of human beings daily pass over this road. If half of our agricultural population pursued their calling with the earnestness that multitudes of men and women seem to pursue some ignus fatuus over stage route, rail-road and steam-boat route, they would accomplish wonders.

It was a lovely pleasant day that I arrived in this busy city, celebrated for its monuments and pretty women. The thriving appearance of Baltimore, indicates a thriving state of agriculture in the vicinity. Among the ornaments of the place I cannot omit to mention the beautiful and romantic resting-place for the dead, which I had an opportunity of visiting during a ride with Robert Sinclair, Jr., out to the nursery of his father at Clairmont, at which place I found *improvement* strongly developed. I also found a hearty welcome, and all the "trimmings," to make my visit interesting. Besides his flourishing nursery business, Mr. S. has a very snug cocoonery, which he finds quite profitable. Having made free use of lime upon his worms this season, he has found them quite healthy. Mr. Sinclair, Jr. has in the city one of the most extensive agricultural ware-houses, perhaps in the U. S. A large portion of the implements that he sells are manufactured under the same roof and in such a manner that he can warrant them good. From the polite attention bestowed upon me, a stranger, I am warranted in the conclusion that my agricultural friends who have occasion to send orders to this establishment for any kind of implements or seeds, will be done by as they would be done unto.

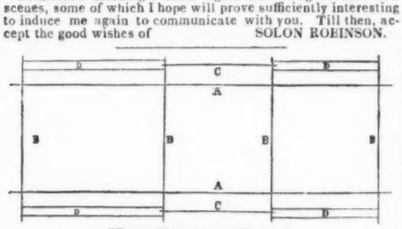
Another of the pleasant days of my life was that in which I made the acquaintance of Mr. Sands, the publisher of the American Farmer, the oldest agricultural paper in the Union. To him and his lovely family I am indebted for a very pleasant visit—such an one as thousands of the friends of agricultural improvement of the present day delight to interchange with one another. Mr. Sands, although grown up in a city, and I might say in a printing office, appears more like a plain unassuming farmer than anything else. He is not only an advocate, like nearly all the leading agriculturists, of temperance, but is also the publisher of a temperance paper. The principle circulation of the Farmer is at the south, and I earnestly hope will long continue to be commensurate with its and its worthy publisher's worth.

I also visited Mr. Hussey's manufactory of his celebrated and valuable reaping machine. This machine is beyond doubt a very useful implement for the farmer, particularly upon very smooth land, such, for instance, as the western prairies. There is, however, in the west a new harvesting machine that bids fair to do away with machines for reaping. It is a machine that actually gathers the grain out of the heads of the standing grain, as clean as it can be thrashed by a machine, leaving the straw standing in the field. I had seen the model of the machine at Chicago last spring, and most unexpectedly to-day I met with my friend Wright, editor of the Chicago Agriculturist, who informs me that the machine has been completed and used during the late harvest, and that it operates to perfection—with three horses, gathering from 10 to 15 acres of wheat a day.

Baltimore also boasts of another lately invented machine, that appears to me to be one that will prove of immense advantage to the community. This is "Page's Saw Mill." The saw is a circular one, and it may be driven by horse or any other power, and is so portable that a mill large enough to saw a log two feet through and twelve feet long, with all the apparatus can be put into a two horse wagon, and taken into the woods and with the assistance of two men, set up and set to work in less than two days, and with the power of the two horses. I dare not say how much lumber *it will* cut per day, but think that you will be satisfied with a thousand feet, although the patentee would not be. In fact, no invention has met my eye that seems better calculatd to be useful to the agricultural community than Page's portable saw mill.

Here as elsewhere wherever I go, I find an earnest spirit pervading all the friends of agricultural improvement, that speaks in cheering tones that our cause is in the ascendant.

To-morrow morning I shall again roll along toward new scenes, some of which I hope will prove sufficiently interesting to induce me again to communicate with you. Till then, accept the good wishes of SOLON ROBINSON.



Hay Rigging—(Fig. 89.)

Messrs Gaylord & Tucker—I have been a reader of the Cultivator from its origin. I have found in its columns a great deal to interest and instruct. It has been to me in many things, as a light that shineth in a dark place. I have in many things been enabled to profit by its instructions. I hail it as a welcome visitor every month. I have often thought of the obligation that rests alike on all, to contribute something to the general stock of knowledge, by communicating whatever we may possess on any profitable subject; but hitherto I have not discharged my duty in this respect, from the general reason that I had much rather be taught, than teach; and particularly from want of time to prepare an article such as would either interest or instruct others. Laying, however, these reasons aside for the present, I will offer through your paper, an answer to "A Subscriber's" inquiry relative to "Hay Rigging," (Cultivator for August, p. 134.)

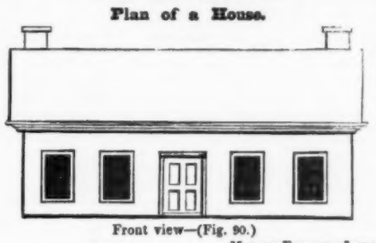
The above drawing is designed to represent a convenient article for hauling hay and grain upon. A, A, under rails 16 feet long, 4 by 3 inches square, of strong light timber; these are to lie upon the bolsters of the wagon on their narrow edge, so that they may have sufficient strength. B, B, B, B, four pieces, 4 by 3 inches square, and of length sufficient to extend 3 inches on each side past the rim of the wheels; they should be of strong light timber. These pieces are put across on top of the under rails, and sunk into them one inch. The first piece in front, say 2 inches from the end of the under rails, and the hinder piece in like manner. The distance between the front piece and second one, 4 feet 10 inches, and between the hinder one and the next forward one, 6 feet. No difference about the distance between the two middle pieces. D, D, D, D, are bows inserted into the ends of the cross pieces by auger holes bored obliquely through the ends of the cross pieces, 2 inches from the ends and 3 inches apart. These bows rise over the wheels and bear up the hay or grain off them; they should be about 2 inches in width and one in thickness. They ought to rise so high over the fore wheels as that the rolling of the bolster on sidling ground will not bring them down upon the wheels. These bows need no other fastening than simply to be slipped into the holes. C, C, two pieces 2 inches wide and 1 thick, resting on the ends of the two middle cross pieces to bear up the hay or grain in the vacancy between the bows. They are fastened on by a small auger hole and pin. The cross pieces are fastened to the under rails with iron bolts and screws. This renders it easy to take the frame apart and store it away when not required for use. It will be requisite to couple the wagon longer for this frame than for ordinary purposes. This has two advantages; it distributes the load equally between the fore and hind part of the wagon, and makes it less liable to upset. This frame will meet the wishes of *A Subscriber*.

On this sort of frame we haul in this country from 20 to 30 hundred pounds of hay, many miles, over the roughest road, when bound on with a good pole along in the middle of the load.

If the foregoing is not worthy a place in your paper, you can throw it aside as waste paper, and I shall not trouble you again.

Knox Co. East-Tennesee, August 27, 1841. A Reader.

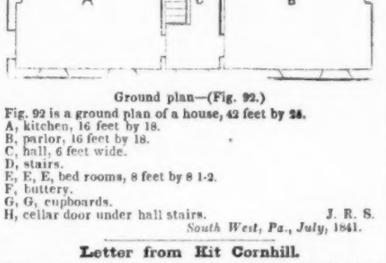
Plan of a House.



Front view—(Fig. 90.)

End view—(Fig. 91.)

Messrs. Editors—I send you a rough draft of a house, 42 feet by 28, one and a half stories high, which I think is both convenient and cheap. As farmers do not generally like to live up stairs, I think a story and a half house will suit a great many of them; the upper part can be finished with two or more rooms as best suits the proprietors. As Mr. W. Reed wished a plain, cheap, convenient house, the following plan may suit him. The cost of this house, like all others, will vary in price according to the country it is built in. It could be built in this section of country for about $700. I have contracted to build one of the following size on the ground, but two stories high, with a portico in front, for a farm house adjoining the village of Titusville, which will cost about ten or eleven hundred dollars. The kitchen chimney will start in the cellar and there can be a fire-place and oven for washing and baking in the cellar if it is required. The plan is original, and if you can put it in order for your paper, and think it will benefit any of your subscribers, it is at your service. J. R. S.



Ground plan—(Fig. 92.)

Fig. 92 is a ground plan of a house, 42 feet by 28.
A, kitchen, 16 feet by 18.
B, parlor, 16 feet by 18.
C, hall, 6 feet wide.
D, stairs.
E, E, E, bed rooms, 8 feet by 8 1-2.
F, buttery.
G, G, cupboards.
H, cellar door under hall stairs. J. R. S.

South West, Pa., July, 1841.

Letter from Kit Cornhill.

Misters Gaylord & Tucker—Fur a grate while I've bin thinkin to rite yu a lettur to let yu kno what a heep ov good yore Papur wur dooin fur us aul down in what we cauls the ainshant dominyun, but I wus sorter jubus I'de make sich a pore fist on it that yu coodent rede it. And i wus feerd too that yude laf at me, as I'me mity skant ov book larnin, which iz yet misrebel scace amung us—mo is the pitty—tho I'me glad to tel yu its gittin a leetel bettur here ov late—But futhur du, thinks I to miself, fante hart never wun fare ladee—so I'de tri—Fy way ov beginin I mus tel yu that befo we tuck to reedin yore Papur we aul chort that book fokes like yu knode nuthin bout practektekel mattur, but now weve larnt that yu knose a site mo than we duz, and so we ar gittin a sort ov a noshun that reedin yore Papur at spar times iz grate deel bettur than idelin about at stores and grog-traps, or guzlin licker at home and then sleepin mo than natur nedes. Anuthur good thing iz that reedin yore Papur puts us on reedin uthur things bout our biznis, & this gives us sum hed wurk to doo ov which we dun mity littel befo, & now we findes our hand wurk gose on aul the bettur & mo knoinly fur it. Evry now & then we setts sum on our boys or gals thats bin to skule to reedin ov nites to us & ther mammys, God bless em, & this makes us aul luve home & wun anuther a vast site bettur than when thar wuz no reedin among us, & nuthin but mopein & yawnin & dozein, & ma be quorrelin arter our daze wurk was dun, or when it raned or snode too hard fur out ov dores wurk, oh, yuve no noshun how kumfurtibel time pases when we pore labrin fokes begins to git a leetel insite into the pleshur and proffit ov reedin good books—its liker meet & drink to a haf starvin man than enny thing else. But yu who always knode how to reed cant undurstand this—I wish yu coud, fur I'me shore twood doo yore harts good to think that yore Papur had helpt to bring so menny on us to sich a good condishun. Wunce evry munth it cums shore enuf to aul on us who takes it, & we goze to our postofficis, purtickler sich as luvs play bettur than wurk, as too menny on us duz to tel yu the truthe ov it, & speshelly bout leeshinneerin times, when sum gits mity drouthee & nose that them that wants ther votes wil be pushin about ther licker, purtendin aul the time they ar treatin us fur pure luv & frendship sake & not fur bribry & korrupshun, oh, no—not fur the wurld wood thay doo sich a skandalus thing—But we nose better, & so we winks at wun anuthur & swollers ther grog aul the same as tho we bleevd em. Then when yore Papur cums—arter a drink or so—we gits our postmaster or sum ov our kandidits or slangwhangers, who ken make shift to reed without spellin, to reed it to us—Then we that scribes fur it takes it home & shose to our children thats jest beginin to tauk yore mazin fine picturs ov hoses, kows, shepe & hogs, & twood make yu most split yore sides lafin to see how the littel things star & cro at em. But to be shore we has mity ofen to caul over the names on em & pints with our fingurs, speshelly at the hogs, befo the littel fellors seem to kno em, fur if the truthe mus be teld yore pictur hogs is no mo like our sharp nosd—long legid—slab sidid grunturs than chauks like chese—May be tis onely them sort ov critters that sum fokes that rites to yu sez wil git fat as mud eetin nuthin in the wurld but appels & rutes & sich truck—Now if this be so, I wish frum my hart we cood git sum ov em here, fur weve ofen did our best to fattin ourn with them sort ov things, but devil a bit ov fat cood we make gro on ther ribs enny mo than we cood on a ben's forid—Without we gives em a nashun site of Ingin corn its a gaun case with us fur poke fit to make baken. As fur yore kow picturs thars pruty much the same puzel to make our littel wuns kno them, & we shude have a mity pore chance to doo it at aul if it wuzent fur the horses—fur our pore, dizmal, rickitty critters kommunly looks much liker skilletens than male kows—speshelly bout March & April when they goze stagrin along in a krank sort ov way like so menny drunken men, & thar oners purtendin aul the time tis the holler haun instid ov the holler belly that makes em lap thar legs over frum side to side jest by way ov keepin them frum fallin doun flat, i spose becaze ther beds swime, pore things—And yit if yule bleeve me Misters, yu may ofen heer these same kow starvin gents bragin to wun anuthur about ther methuds & ther sistims as thay cauls ther doins—jest as if thay knode aul about farmin & them sort of things—I'me not jokin wun bit gentelmen—but its enuf to make a dog laf—that it is—to lissen to em & see how knoin they looks in wun anuthurs faces—who but they so mity wize & up to teechin aul uthur fokes how to be farmers—its good as gwine to a play actin to se & heer em at sich sort ov tauk.

When I wuz ritin bout hogs thay wuz wun thing I furgot to menshun, which wuz that in reedin ov these nu fashun crittura that yore friends prase so much & insis that thay wil git rite fat on appels, rutes & sich sort ov stuf without even a bit ov enny kind ov grane—sum on us coodent help suspishunin that sich norashuns cum mity nere what the salurs cauls long yarns & we cauls strechers—not that I mpself is aultogethur wun of these suspishuners, bein satisfide that if wele bleeve nuthin that we duzent se & kno, wele have but a slim chance to doo wel ithur in this wurld or the nex—But betwene ourselves, I mus say that when enny fokes rite to yu what they never kno, is mity hard fur us clodhoppurs to undurstand & think tru, it wood always be a heep bettur to sine ther owu proppur names, & ad the names ov sum witinisis too if thay cood git enny—I've jest sed that I wuzent aultogethur wun ov these suspishuners, but I red wun thing tuthur day that staged me mazinly—It wuz that sum fokes—I furgit ther names—in Kanetuck did make ten yeer 200 bushels ov corn frum ounly wun aker ov lan—Now, when I fust red this I wuz dumfoundid fur sum time. Howsumdever, arter a while I gits out ov this fix, & I axis a frend that knos aul about rethmetic matturs to kalkilate how much corn this wood be to the square yarde—So he sums ups & tels me, moste 9 jils—Prodijus says I, & evn so sez he, fur we downe Olde Fejinne thinks we ar takin the rag off the bush if we ken squese out as menny as 3 jils, & evn then we is moste afeerd to tel it without witnisis—Stil I've heern say that nuthins unposibil but fur a man to bite his own noze off, & tharfoor I'me not surr but 200 bushils & evn mo corn mite be made from wun aker—but it shutes so fur e hed ov enny on us heerabouts that to make it jinrelly knowne in these parts yit a while, wood put us aul mizribly down in the mouth with our own littel crops. And wusser yit, we shood be so out ov hart nex corn planin time, that we cood have no sich good stummack to our wurk as we must have if we hadent heern of this grate Kanetuck crop, that beats aul natur. And now good Misturs Gaylord & Tucker if yu wil exkuze bad ritin & a grate site wus spelin, I'le bid yu both farwel, bein yore rale but stranjur frend,

Old Feginne, May 12, 1841. KIT CORNHILL

Relief of Choked Cattle.

Messrs. Editors—Believing the fact is not generally understood, that ruta bagas seldom need cutting or slicing, I would state that for three years past, I have in no case cut them for any thing having good teeth. Sheep eat them decidedly better when fed whole, and cattle never choke on them. When I practiced cutting, scores of cattle were sometimes choked in a season; and here permit me to remark, that when such an accident occurs, I use a flexible rod about four feet long, three-fourths of an inch in diameter; wind a wad of tow, the size of a hen's egg, around the butt end; tie a rag tightly over it, grease it and push gently down the throat. To keep the mouth open take a piece of hard wood, one foot long, four inches wide, one inch thick, bring the ends to a point, bore a hole one and a half inches diameter through the center, push through the mouth, turn on the edge and pass the rod through the hole. I have never failed in any instance in thus giving effectual and permanent relief. With such an apparatus on hand, five minutes is sufficient to relieve the worst cases. Respectfully yours,

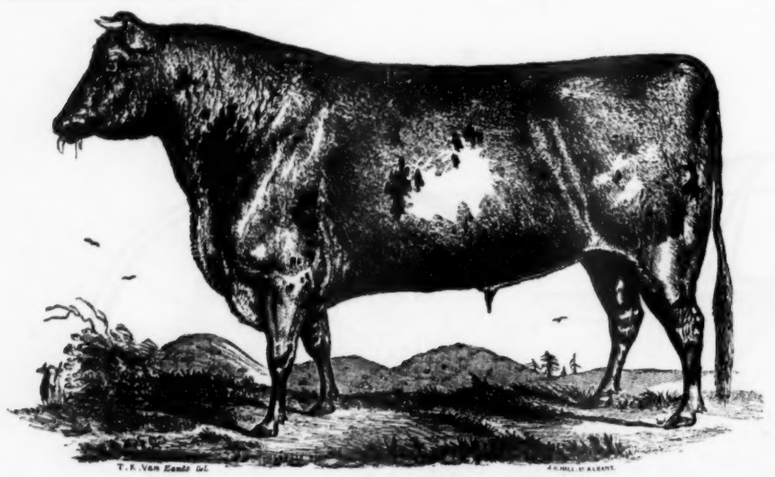
Whalen's Store, Nov. 15, 1841. SETH WHALEN.

The Horse—Inquiry.

Messrs. Gaylord & Tucker—I avail myself of the privilege which is so freely accorded to the agricultural community, to address an inquiry with regard to the Canadian breed of horses. I have seen Mr. George Barnard's seemingly undeniable proofs of their agency in producing the Morgan breed, which are almost unparalleled for endurance and speed. Cult vol. 8, No. 10. What I wish to know is, whether a cross with one of them on the large Pennsylvania mares would not produce exactly the animal required, getting endurance, speed, style and action from the sire, and size, weight and strength from the dam, and also being free from that fault of the blood horse, which is technically termed having too much *day-light* under him. The introduction of the Arabian is the making of the race-horse, and why not the Canadian our work-horse?

I have proposed only one cross; I hope, however, persons practically experienced will communicate what they know, not only about this, but any other cross in which they may have been tried. These remarks are respectfully submitted to my fellow-subscribers in the hope of eliciting something on this important subject. WILLIAM E. OLDEN

Rodman, Bucks co., Pa., Nov. 12, 1841.



T. R. Van Zandt del. A. H. HALL, 57 ALBANY.

MR. BEMENT'S SHORT HORN BULL ASTORIA.—[Fig. 68.]

The subject of the above cut is the "Improved Durham Short Horned Bull" Astoria, bred by, and the property of, C. N. Bement, of Three Hills Farm, Albany. It was cut on wood by Mr. Hall, of this city, from a painting from life by T. R Van Zandt, also of this city, a young artist of great promise, in the line of animal painting; and I avail myself of the present opportunity of recommending him to the notice of gentlemen who feel desirous of preserving their animals on *canvas*, and encouraging a modest, unassuming young artist, whose terms are moderate, and whose skill in delineation, is admitted by all who have seen his portraits.

The painting from which this was taken is acknowledged by all who have seen the animal, to be a good and faithful portrait and not flattered; but on transferring it to the block, the head has been diminished and placed a little too high, which, however, is not much exaggerated, when animated by the appearance of other cattle. The loin is also too full, the back too straight, and he is cut up too high in the flank.

It would not be proper for me to say much in favor of my own property; nor is it expected that any animal should be so perfect as to merit entire approval; but the owner would be perfectly satisfied to submit him to a comparison, taking him in all points, with any other bull of the same age, and reared under the same circumstances, having never been pampered or fed high on grain. He has no very extraordinary point to catch the eye, but is remarkably even and symmetrical.

Astoria, when painted, was two years and eleven months old, and measured at the time, from the centre of his horns to the root of his tail, seven feet and three inches—girth around his heart, six feet and nine inches—around his flank, six feet seven inches—four feet seven inches high, and raised the beam with 1510 pounds in ordinary working condition. I am well aware that his measurement or weight is nothing extraordinary, unless his treatment and keeping is taken into consideration; for it is well known that by forcing with high feed, animals may be made to measure and weigh much more, and it is equally well known that animals so forced, particularly bulls, often become impotent and useless.

Although he is full and ripe in all his points, he is not yet in his prime; still he possesses the essentials of *good handling*—his skin being thin and elastic—his hair soft and silky. His color white, inclining to a cream, interspersed with dark red spots on his neck and body. He is deep in the fore quarter, as you will perceive by the portrait, well filled up behind the shoulders, a point sometimes deficient in animals of this breed—broad across the hips and loin—flank well let down—body round and ribs arching—legs neither too large or too small, but well proportioned. He has more vigor and stamina than any other bull I have ever owned; but after all, the best evidence of his value is in his stock, which he stamps with the same gay, upheaded appearance as himself; giving them small beautiful heads, with bright, full, and prominent eyes. I have now a yearling bull of his get, more promising than his sire was at the same age, and one bull and six heifer calves, sired by him, which are acknowledged by all who have seen them, to be very beautiful animals, possessing in an eminent degree that gay and lively appearance of their sire.

Pedigree.—Astoria was calved July 14, 1838, got by Ajax, (bred by Gen. S. Van Rensselaer, and got by Washington,) dam Delia, by Carlos, 1757,—g. dam Dulcibella, (bred by Mr. Whitaker,) by Frederick, 1060—g. g. dam Delicia by Major, 2252—g. g. g. dam by Comus 1862—g. g. g. g. dam by Marske 418—g. g. g. g. g. dam by Wetherell's ———.

This bull was exhibited at the late Fair of the N. Y. State Agricultural Society, in the first class, and received a premium of eight dollars, and excited great attention by the numerous visitors on the ground, and by many considered the best bull exhibited. C. N. BEMENT.

Means of Promoting a Knowledge of Meteorology.

[The communication from "E. S." has been a long time waiting for a place, and we are now only able to give a part of it. For some previous remarks on the subject, the reader is referred to Vol. 7, p. 97.]

The various sciences which have engaged the attention of mankind have been almost entirely originated by the efforts and discoveries of individuals, and by the same means, brought to various degrees of perfection and consequent usefulness, but where they have been made greatly or extensively useful, it has seldom been by unassisted individual exertion. Indeed it could hardly be expected that persons should exert the faculties of the mind, and of the body in some cases, to any great degree, with no other prospect of remuneration, than that of fame, or the gratification of their curiosity, neither of which, though in some cases they have effected, and may still effect much, can be expected to produce that energy, (much less as respects some of the sciences, especially this one,) that simultaneousness of action, so necessary to their successful prosecution. To what, therefore, shall we look for the means of producing the necessary co-operation and accuracy?

This may be best answered by referring to those sciences in which great and useful improvements have been effected, and inquiring into the means by which those improvements were brought about.

Astronomy had been cultivated from very remote antiquity, and by a great number of persons, some of wealth and power, but (even among such) it was usually privately, or as a matter of curiosity, and not as a matter of necessity, or of great or general interest, to any great extent, and was consequently pursued in quite a desultory manner; hence, though considerable progress was made, yet at the revival of learning in the 15th and 16th centuries it had attained but little of that practical accuracy so necessary to render efficient aid in the extended voyages that began to be undertaken. As commerce still increased, the want of greater certainty in ascertaining the place of a ship at sea, and especially of a method of determining the longitude, attracted the attention of various European governments, especially of Great Britain, and in the latter produced the Royal Observatory at Greenwich, and similar establishments in France and elsewhere. The benefits that have accrued to commerce from these, scarcely need comment here. Suffice it to say they are intimately connected with the rapid progress which it has made in modern times. And similar are the good effects of the patronage which the French government extended to chemistry, when, cut off from their accustomed supplies of saltpeter and sugar, by the naval ascendancy of Great Britain, they sought to produce them within their own territory, and by its aid, as is well known, completely succeeded. But, (among others which might be adduced,) we have in our own country an instance which is scarcely less conclusive; I allude to the geological survey, the benefits arising from which are so great, and beginning to be so well appreciated that the mention of them is deemed a good confirmation of the principle involved in the other instances just given, that though private investigations may do much, yet to bring about that perfection in sciences of public utility, which will enable them to give extensive or important aid in the arts, the more efficient aid of government must be given.

But what probability is there that governments will be induced to give aid and encouragement to this science?

Judging from past events we should say that when individuals by their private efforts give decisive evidence that the improvement and perfecting of meteorology would be really practicable and useful, governments would not be long in extending their aid, upon a due representation of the subject to them;—and though in a general way it may be said that a republican government is more reserved and shy of new schemes than others, yet the prompt and almost simultaneous action of most of our states upon the subject of geological surveys, is an abundant earnest of the encouragement which would be given to this science under suitable circumstances.

But notwithstanding the small advancement that has hitherto been made in meteorology, at least so far as refers to exhibiting decisive proof of its practical utility, (though it must be admitted that some facts of importance have been ascertained,) we have very encouraging evidence of a disposition to promote this science. The following is taken from a Philadelphia paper, July 6, 1839.

"*The cause of storms*, it appears, is beginning seriously to engage philosophical attention. Lord Glenelg, the Colonial Secretary of the British Government, has sent instructions to various agents of the government resident abroad, captains of posts, harbor-masters, and keepers of light-houses, to keep journals of the weather, on the principle of log-books of ships, to note the height of the barometer, and enter all meteorological observations worthy of notice. As the object in instituting these inquiries is the advancement of knowledge and science generally, the governors of the several British colonies are directed to consider how far it may be in their power to obtain useful information bearing on the subject from countries adjoining to their governments in the possession of foreign powers, or how far it may be useful to the study of meteorology, to exchange the observations made within their governments for those of other countries in the neighborhood."

Thus it appears that this greatest of the nations of the old world, after having obtained such lasting and beneficial results through the policy which has there been so well persevered in, of encouraging every science which there was reason to believe would be beneficial to society, is not disposed to abandon one which has been productive of so much good, not to itself alone, but, it is but just to say, to other nations, and particularly to ours. The plan adopted, also, appears highly judicious, particularly on account of the provision to obtain observations over so large a part of the habitable globe as the widely separated dominions of the British Empire, and the proposed plan of exchanging observations with other governments will enable them to do; and not less valuable is the provision to obtain observations on the natural phenomena, which appear to have been but little attended to hitherto, but without which it appears to the writer, (and the opinion is corroborated by the example of the other natural sciences,) that results of practical utility to "the plowman, the mariner, and the fisherman," will not be obtained.

If such is the vigor with which the British government is about to prosecute this science, shall the United States, which have already reaped such advantages from sciences promoted by other nations, be backward in lending their aid in the promotion of this, in which another has so fairly led the way, and in which they as the second commercial nation on the globe, and still more so, on account of their vast and rapidly increasing agriculture, have such a deep interest? It affords me pleasure to say, that a disposition has already been evinced, in that quarter where it is most likely to effect the object in view, of aiding effectually the advancement of meteorology. The following paragraph, which is taken from another Philadelphia paper, dated July 11, 1840, will doubtless be gratifying to those who have not already been made acquainted with the information it contains, and who desire the promotion of this science.

"*Philosophical observations.*—Mr. Adams from a select committee, reported to the House this day, the following resolution:

"*Resolved*, That the sum of twenty thousand dollars ought to be appropriated for the establishment of five several stations, at suitable distances from each other, for making observations of terrestrial magnetism and meteorology, conformably to the invitation from the Royal Society of Great Britain, to the American Philosophical Society at Philadelphia, and other learned societies in the United States; and that the said sum should be placed under the direction and at the disposal of the Secretary of War, for the fulfillment of those purposes, he to account for the expenditures thus authorized, to the Treasury of the United States."

The foregoing paragraph which was a detached one, was not accompanied with any date, except the date of the newspaper, which of course cannot be the day mentioned in it; it is, however, to be inferred that the report was made during the last session of Congress; and it appears evident, (though I have no other information on that point, than what is contained in those two paragraphs,) that it was intended thereby to co-operate in the plan proposed by the British government, above mentioned. Be this as it may, the proposed measure, (for I have not heard that the resolution was adopted,) is a wise, and even liberal one, in this incipient stage of the science, and reflects much credit on its illustrious proposer, though doubtless incomparably small in proportion to the advantages which would accrue to the farmer and mariner, and indeed, in a greater or less degree, to almost every citizen, if this subject receives the attention which it merits. But lest, for the want of a proper degree of interest being manifested in the subject by those whom it most concerns, even the proposed aid should be withheld, let us, farmers especially, take the matter in hand individually, yet co-operatively, and there is but little doubt that by making observations on the weather, of the proper kind, in every part of our country, and duly comparing them, we shall be enabled to convince the most incredulous of the advantages of, ensure the aid of government in, and when that is obtained, greatly assist and hasten the accomplishment of its designs for the promotion of meteorology. E. S.

Montgomery county, Penn., Dec. 31, 1840.

Traveling Memoranda—No. 6.

Baltimore, Sep. 9, 1841

Editors of Cultivator—Once more I am ready to make another memoranda for the perusal of the readers of the Cultivator. How I could dilate upon the subject of the great change that 40 years have wrought upon the face of Ohio. How the dense forest has given way before the hand of persevering industry, and laid open immense fields of the richest of soil to cultivation, and increase of wealth and happiness. But notwithstanding the splendid mansion now occupies the site of the lowly log cabin, I cannot believe that there is more real enjoyment within, than the owner used to feel while gathered around the broad blazing fire of the settler's new home. It is the contented and cheerful mind that finds enjoyment in whatever situation his lot may chance to be cast.

What a wild uncultivated waste was this fine region 40 years ago. Even 15 years since, how we used to toil along the muddy roads of Ohio, the stage often to the axles in the soft, wet soil, and the passengers not unfrequently called upon to lend the strength of Hercules to lift the vehicle into an upright position. Now the road from Cincinnati to Columbus is nearly all Macadamized, and from thence, or rather from Springfield to Wheeling, we roll in ease and comfort, at great speed, along the great National road that was designed to connect the east with the far west. As an evidence that the roads are not quite impassable, I have only to state that I took the "fast mail" at 11 o'clock on Friday at Cincinnati, and on Monday night I slept at the "relay house," nine miles from Baltimore, traveling by stage all the way, except the short distance from Frederick to the junction of the Washington City Road.

The passes of the almost impassable Alleghanies, have been made passable, and are daily passed by a host of passengers with great speed, if not great safety; for the truth is, that fear of accident does not seem to be a part of the composition of the drivers over these dangerous mountain roads, for they crack the whip and rattle down the long declivities much after the manner that we are all heedlessly rattling through the world. We are all sure to reach the end of the road, but not always "right side up with care."

It was with no small degree of interest that I looked upon these hills piled on hills. For 16 years I had been treading the fertile plains of the west, and in all that time had not seen an eminence worthy of the name of mountain. Here were old acquaintance that should never be forget. And here upon every little spot of level ground was perched the hut of a hardy mountaineer, as blythe, as happy and contented as him who could count his thousands of acres of far more fertile and feasible soil of the west. I could not but ask, "why do you toil here upon these rocks and hills?" and yet perhaps I should do wrong to urge them to give up situations, with which they are content, for the more promising plains that spread out invitingly and uncultivated away beyond the "beautiful river."

Of my doings at Washington in regard to the contemplated National Society, you are acquainted. Of the state of agricultural improvement around the capital of our country, I cannot speak encouragingly. In fact, to me, the quality of the soil presents a very forbidding aspect. By far the greatest portion of it looks to me as though it would cost more than it would come to, to put it into a good state of cultivation. The "skinning system" seems to have been thoroughly practiced here, where originally there was but little to skin, until the fertility has been so completely skinned from the soil, that I should think the present cultivators would find some difficulty in raising enough to keep their own skins full.

But there are some noble and spirited friends of agricultural improvement in and around Washington, among whom Mr. Ellsworth stands foremost. While I was there, he was engaged in an experiment of making a cheap machine for making a ditch and bank fence, of which the public will hereafter hear something. He is constant and unceasing in his efforts to promote the agricultural interest of the United States, and has partially succeeded in converting the Patent office into an agricultural bureau. He has purchased a few acres of the "vacant lots," which abound upon the original great plat of this *to be* great city, for the purpose of trying different kinds of seeds, and making experiments and illustrations in farming, for the benefit of the community. His plan of distributing seeds throughout the country has been of great advantage to the country, at small cost to the government. Every friend of the measure should feel it a duty to forward to him for distribution, a small quantity of every rare seed that he may possess. And I hope that every friend who attends the first meeting of the National Agricultural Society on the 15th Dec. next, will at least take his pockets full of such seeds as he may happen to possess, for the purpose of exchange.

Washington city, like a great many other great things in this great country, was begun on too great a scale. I judge from

appearances, that the citizens are not strong advocates of "internal improvements," so far as their own corporation is concerned.

The public buildings are the great, I may say the only ornaments of Washington. To me the Patent office possesses the greatest interest. Independent of the models, nearly all of which that were burnt having been replaced, there is the great "Hall of Manufactures," in which it is designed to exhibit specimens of all kinds of manufactures of the United States, forming one of the most interesting collections in the country. It is also intended to exhibit specimens of every known kind of agricultural implement, from the earliest ages to this time; also a collection of all kinds of grains and seeds.

The Smithsonian collection of curiosities, and also that of the exploring expedition, together with the gallery of Indian portraits, are now exhibited in this building, forming in the whole, an extensive free museum.

From Washington to Baltimore, along the line of the railroad, the land is mostly miserably poor and uncultivated. It is surprising to see what a mass of human beings daily pass over this road. If half of our agricultural population pursued their calling with the earnestness that multitudes of men and women seem to pursue some ignus fatuus over stage route, rail-road and steam-boat route, they would accomplish wonders.

It was a lovely pleasant day that I arrived in this busy city, celebrated for its monuments and pretty women. The thriving appearance of Baltimore, indicates a thriving state of agriculture in the vicinity. Among the ornaments of the place I cannot omit to mention the beautiful and romantic resting-place for the dead, which I had an opportunity of visiting during a ride with Robert Sinclair, Jr., out to the nursery of his father at Clairmont, at which place I found *improvement* strongly developed. I also found a hearty welcome, and all the "trimmings," to make my visit interesting. Besides his flourishing nursery business, Mr. S. has a very snug cocoonery, which he finds quite profitable. Having made free use of lime upon his worms this season, he has found them quite healthy. Mr. Sinclair, Jr. has in the city one of the most extensive agricultural ware-houses, perhaps in the U. S. A large portion of the implements that he sells are manufactured under the same roof and in such a manner that he can warrant them good. From the polite attention bestowed upon me, a stranger, I am warranted in the conclusion that my agricultural friends who have occasion to send orders to this establishment for any kind of implements or seeds, will be done by as they would be done unto.

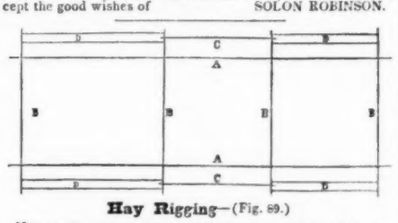
Another of the pleasant days of my life was that in which I made the acquaintance of Mr. Sands, the publisher of the American Farmer, the oldest agricultural paper in the Union. To him and his lovely family I am indebted for a very pleasant visit—such an one as thousands of the friends of agricultural improvement of the present day delight to interchange with one another. Mr. Sands, although grown up in a city, and I might say in a printing office, appears more like a plain unassuming farmer than anything else. He is not only an advocate, like nearly all the leading agriculturists, of temperance, but is also the publisher of a temperance paper. The principle circulation of the Farmer is at the south, and I earnestly hope will long continue to be commensurate with its and its worthy publisher's worth.

I also visited Mr. Hussey's manufactory of his celebrated and valuable reaping machine. This machine is beyond doubt a very useful implement for the farmer, particularly upon very smooth land, such, for instance, as the western prairies. There is, however, in the west a new harvesting machine that bids fair to do away with machines for reaping. It is a machine that actually gathers the grain out of the heads of the standing grain, as clean as it can be thrashed by a machine, leaving the straw standing in the field. I had seen the model of the machine at Chicago last spring, and most unexpectedly to-day I met with my friend Wright, editor of the Chicago Agriculturist, who informs me that the machine has been completed and used during the late harvest, and that it operates to perfection—with three horses, gathering from 10 to 15 acres of wheat a day.

Baltimore also boasts of another lately invented machine, that appears to me to be one that will prove of immense advantage to the community. This is "Page's Saw Mill." The saw is a circular one, and it may be driven by horse or any other power, and is so portable that a mill large enough to saw a log two feet through and twelve feet long, with all the apparatus can be put into a two horse wagon, and taken into the woods and with the assistance of two men, set up and set to work in less than two days, and with the power of the two horses. I dare not say how much lumber *it will* cut per day, but think that you will be satisfied with a thousand feet, although the patentee would not be. In fact, no invention has met my eye that seems better calculatd to be useful to the agricultural community than Page's portable saw mill.

Here as elsewhere wherever I go, I find an earnest spirit pervading all the friends of agricultural improvement, that speaks in cheering tones that our cause is in the ascendant.

To-morrow morning I shall again roll along toward new scenes, some of which I hope will prove sufficiently interesting to induce me again to communicate with you. Till then, accept the good wishes of SOLON ROBINSON.



Hay Rigging—(Fig. 89.)

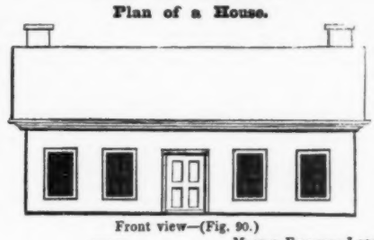
Messrs Gaylord & Tucker—I have been a reader of the Cultivator from its origin. I have found in its columns a great deal to interest and instruct. It has been to me in many things, as a light that shineth in a dark place. I have in many things been enabled to profit by its instructions. I hail it as a welcome visitor every month. I have often thought of the obligation that rests alike on all, to contribute something to the general stock of knowledge, by communicating whatever we may possess on any profitable subject; but hitherto I have not discharged my duty in this respect, from the general reason that I had much rather be taught, than teach; and particularly from want of time to prepare an article such as would either interest or instruct others. Laying, however, these reasons aside for the present, I will offer through your paper, an answer to "A Subscriber's" inquiry relative to "Hay Rigging," (Cultivator for August, p. 134.)

The above drawing is designed to represent a convenient article for hauling hay and grain upon. A, A, under rails 16 feet long, 4 by 3 inches square, of strong light timber; these are to lie upon the bolsters of the wagon on their narrow edge, so that they may have sufficient strength. B, B, B, B, four pieces, 4 by 3 inches square, and of length sufficient to extend 3 inches on each side past the rim of the wheels; they should be of strong light timber. These pieces are put across on top of the under rails, and sunk into them one inch. The first piece in front, say 2 inches from the end of the under rails, and the hinder piece in like manner. The distance between the front piece and second one, 4 feet 10 inches, and between the hinder one and the next forward one, 6 feet. No difference about the distance between the two middle pieces. D, D, D, D, are bows inserted into the ends of the cross pieces by auger holes bored obliquely through the ends of the cross pieces, 2 inches from the ends and 3 inches apart. These bows rise over the wheels and bear up the hay or grain off them; they should be about 2 inches in width and one in thickness. They ought to rise so high over the fore wheels as that the rolling of the bolster on sidling ground will not bring them down upon the wheels. These bows need no other fastening than simply to be slipped into the holes. C, C, two pieces 2 inches wide and 1 thick, resting on the ends of the two middle cross pieces to bear up the hay or grain in the vacancy between the bows. They are fastened on by a small auger hole and pin. The cross pieces are fastened to the under rails with iron bolts and screws. This renders it easy to take the frame apart and store it away when not required for use. It will be requisite to couple the wagon longer for this frame than for ordinary purposes. This has two advantages; it distributes the load equally between the fore and hind part of the wagon, and makes it less liable to upset. This frame will meet the wishes of *A Subscriber*.

On this sort of frame we haul in this country from 20 to 30 hundred pounds of hay, many miles, over the roughest road, when bound on with a good pole along in the middle of the load.

If the foregoing is not worthy a place in your paper, you can throw it aside as waste paper, and I shall not trouble you again.
Knox Co. East-Tennessee, August 27, 1841. A Reader.

Plan of a House.



Front view—(Fig. 90.)

End view—(Fig. 91.)

Messrs. Editors—I send you a rough draft of a house, 42 feet by 28, one and a half stories high, which I think is both convenient and cheap. As farmers do not generally like to live up stairs, I think a story and a half house will suit a great many of them; the upper part can be finished with two or more rooms as best suits the proprietors. As Mr. W. Reed wished a plain, cheap, convenient house, the following plan may suit him. The cost of this house, like all others, will vary in price according to the country it is built in. It could be built in this section of country for about $700. I have contracted to build one of the following size on the ground, but two stories high, with a portico in front, for a farm house adjoining the village of Titusville, which will cost about ten or eleven hundred dollars. The kitchen chimney will start in the cellar and there can be a fire-place and oven for washing and baking in the cellar if it is required. The plan is original, and if you can put it in order for your paper, and think it will benefit any of your subscribers, it is at your service. J. R. S.

Ground plan—(Fig. 92.)

Fig. 92 is a ground plan of a house, 42 feet by 28.
A, kitchen, 16 feet by 18.
B, parlor, 16 feet by 18.
C, hall, 6 feet wide.
D, stairs.
E, E, E, bed rooms, 8 feet by 8 1-2.
F, buttery.
G, G, cupboards.
H, cellar door under hall stairs. J. R. S.
South West, Pa., July, 1841.

Letter from Kit Cornhill.

Misters Gaylord & Tucker—Fur a grate while I've bin thinkin to rite yu a lettur to let yu kno what a heep ov good yore Papur wur dooin fur us aul down in what we cauls the ainshant dominyun, but I wus sorter jubus I'de make sich a pore fist on it that yu coodent rede it. And i wus feerd too that yude laf at me, as I'me mity skant ov book larnin, which iz yet mi-rebel scace amung us—mo is the pitty—tho I'me glad to tel yu its gittin a leetel bettur here ov late—But tuthur da, thinks I to miself, fante hart never wun fare ladee—so I'de tri—By way ov beginin I mus tel yu that befo we tuck to reedin yore Papur we aul thort that book fokes like yu knode nuthin bout pracktekel mattur, but now weve larnt that yu knose a site mo than we duz, and so we ar gittin a sort ov a noshun that reedin yore Papur at spar times iz grate deel bettur than idelin about at stores and grog-traps, or guzlin licker at home and then sleepin mo than natur nedes. Anuthur good thing iz that reedin yore Papur puts us on reedin uthur things bout our biznis, & this gives us sum hed wurk to doo ov which we dun mity littel befo, & now we findes our hand wurk gose on aul the bettur & mo knoinly fur it. Evry now & then we setts sum on our boys or gals thats bin to skule to reedin ov nites to us & ther mammys, God bless em, & this makes us aul luve home & wun anuther a vast site bettur than when thar wuz no reedin amung us, & nuthin but mopein & yawnin & dozein, & ma be snorrelin arter our daze wurk was dun, or when it raned or snode too hard fur out ov dores wurk, oh, yuve no noshun how kumfurtibel time passe when we pore labrin fokes begins to git a leetel insite into the pleshur and proffit ov reedin good books—its liker meet & drink to a haf starvin man than enny thing else. But yu who always knode how to reed cant undurstand this—I wish yu cood, fur I'me shore twood doo yore harts good to think that yore Papur had helpt to bring so menny on us to sich a good condishun. Wunce every munth it cums shore enuf to aul on us who takes it, & we goze to our postofficis, purtickler sich as luvs play bettur than wurk, as too menny on us duz to tel yu the truthe ov it, & speshelly bout lecshinneerin times, when sum gits mity drouthee & nose that them that wants ther votes wil be pushin about ther licker, purtendin aul the time they ar treatin us fur pure luv & frendship sake & not fur bribry & korrupshun, oh, no—not fur the wurld wood thay doo sich a skandalus thing—But we nose better, & so we winks at wun anuthur & swollers ther grog aul the same as tho we bleevd em. Then when yore Papur cums—after a drink or so—we gits our postmaster or sum ov our kandidits or klangwhangers, who kan make shift to reed without spellin, to reed it to us—Then we that scribes fur it takes it home & shose to our children thats jest beginin to tauk yore mazin fine picturs ov hosses, kows, shepe & hogs, & twood make yu most split yore sides lafin to see how the littel things star & cro at em. But to be shore we has mity ofen to caul over the names on em & pints with our fingurs, speshelly at the hogs, befo the littel fellors seem to kno em, fur if the truthe mus be teld yore pictur hogs is no mo like our sharp nosd—long legsd—slab sidd gruntors than chauks like chese—May be tis onely them sort ov critters that sum fokes that rites to us sez wil git fat as mud eetin nuthin in the wurld but appels & rutes & sich truck—Now if this be so, I wish frum my hart we cood git sum ov em here, fur were ofen did our best to fattin ourn with them sort ov things, but devil a bit ov fat cood we make gro on ther ribs enny mo than we cood on a hen's forid—Without we give em a nashun site of Ingin corn its a gaun case with us fur poke fit to make baken. As fur yore kow picturs thars pruty much the same puzel to make our littel wuns kno them, & we shude have a mity pore chance to doo it at aul if it wuzent fur the horses—fur our pore, dizmal, rickiity critters kommunly looks much liker skilletens than rale kows—speshelly bout March & April when they goze stagrin along in a krank sided sort ov way like so menny drunken men, & thar oners purtendin aul the time tis the holler haun instid ov the holler belly that makes em lap thar legs over frum side to side jest by way ov keepin them frum fallin doun flat, I spose becaze ther heds swime, pore things—And yit if yule bleeve me Misters, yu may ofen heer these same kow starvin gents bragin to won anuthur about ther methuds & ther sistims as thay cauls ther dooins—jest as if they knode aul about farmin & them sort of things—I'me not jokin wun bit gentelmen—but its enuf to make a dog laf—that it is—to lissen to em & see how knoin they looks in wun anuthurs faces—who but they so mity wize & up to teechin aul uthur fokes how to be farmers—its good as gwine to a play actin to se & heer em at sich sort ov tauk.

When I wuz ritin bout hogs thar wuz wun thing I furgot to menshun, which wuz that in reedin ov these nu fashun critturs that yore friends prase so much & insis that thay wil git rite fat on appels, rutes & sich sort ov stuf without even a bit ov enny kind ov grane—sum on us coodent help suspishunin that sich norashuns cum mity nere what the salurs cauls long yarns & we cauls strechers—not that I myself is aultogethur wun of these suspishuners, bein satisfide that if wele bleeve nuthin that we duzent se & kno, wele have but a slim chance to doo wel ithur in this wurld or the nex—But betwene ourselves, I mus say that when enny fokes rite to yu what they never kno, is mity hard fur us clodhoppurs to undurstand & think tru, it wood always be a heep bettur to sine ther own proppur names, & ad the names ov sum witinsis too if thay cood git enny—I've jest sed that I wuzent aultogethur wun ov these suspishuners, but I red wun thing tuthur day that stagerd me mazinly—It wuz that sum fokes—I furgit ther names—in Kanetuck did make las yeer 200 bushels ov corn frum ounly wun aker ov lan—Now, when I fust red this I wuz dumfoundid fur sum time. Howsumdever, arter a while I gits out ov this fix, & I axis a frend that knos aul about rethmetic matturs to kalkilate how much corn this wood be to the square yarde—So he sums ups & tels me, moste 9 jils—Prodijus says I, & evn so sez he, fur we downe Olde Feginne thinks we ar takin the rag off the bush if we sen squese out as meany as 3 jils, & evn then we is moste afeerd to tel it without witnisis—Stil I've heern say that nuthins onposisibil but fur a man to bite his own noze off, & tharfoor I'me not suar but 200 bushils & evn mo corn mite be made frum wun aker—but it shutes so fur e hed ov enny on us heerabouts that to make it jinrelly knowne in these parts yit a while, wood put us aul mizribly down in the mouth with our own littel crops. And wusser yit, we shood be so out ov hart sex corn plantin time, that we cood have no sich good stummack to our work as we wout have if we hadent heern of this grate Kanetuck crop, that beats aul natur. And now good Misturs Gaylord & Tucker if yu wil exkuze bad ritin & a grate site wus spelin, I'le bid yu both farwel, bein yore rale but stranjur frend,
Old Feginne, May 12, 1841. KIT CORNHILL

Relief of Choked Cattle.

Messrs. Editors—Believing the fact is not generally understood, that ruta bagas seldom need cutting or slicing, I would state that for three years past, I have in no case cut them for any thing having good teeth. Sheep eat them decidedly better when fed whole, and cattle never choke on them. When I practiced cutting, scores of cattle were sometimes choked in a season; and here permit me to remark, that when such an accident occurs, I use a flexible rod about four feet long, three-fourths of an inch in diameter; wind a wad of tow, the size of a hen's egg, around the butt end; tie a rag tightly over it, grease it and push gently down the throat. To keep the mouth open take a piece of hard wood, one foot long, four inches wide, one inch thick, bring the ends to a point, bore a hole one and a half inches diameter through the center, push through the mouth, turn on the edge and pass the rod through the hole. I have never failed in any instance in thus giving effectual and permanent relief. With such an apparatus on hand, five minutes is sufficient to relieve the worst cases. Respectfully yours,
Whalen's Store, Nov. 18, 1841. SETH WHALEN.

The Horse—Inquiry.

Messrs. Gaylord & Tucker—I avail myself of the privilege which is so freely accorded to the agricultural community, to address an inquiry with regard to the Canadian breed of horses I have seen Mr. George Barnard's seemingly undeniable proofs of their agency in producing the Morgan breed, which are almost unparalleled for endurance and speed. Cult vol. 8, No. 10. What I wish to know is, whether a cross with one of them on the large Pennsylvania mares would not produce exactly the animal required, getting endurance, speed, style and action from the sire, and size, weight and strength from the dam, and also being free from that fault of the blood horse, which is technically termed having too much *day-light* under him. The introduction of the Arabian is the making of the race-horse, and why not the Canadian our work-horse?

I have proposed only one cross; I hope, however, persons practically experienced will communicate what they know, not only about this, but any other cross in which they may have been tried. These remarks are respectfully submitted to my fellow-subscribers in the hope of eliciting something on this important subject. WILLIAM R. OLDEN
Rodman, Bucks co., Pa., Nov. 12, 1841.

Wheat Culture—Queries.

Messrs. Editors—I have noticed in almost every number of the Cultivator, something in relation to wheat and *rye* producing (or turning to) chess. But never until your Nov. number appeared, had I supposed it possible that *oats* would produce chess. Nor do I believe it now. I wish, however, to tell you what I do know, in regard to wheat producing chess. But in the first place allow me to state, that I am the individual who presented to Mr. Goodsell, (the then editor of the Genesee Farmer,) that famous head of wheat from which was growing *apparently* several grains of chess. I never was a believer in the transmutation of wheat to chess until that specimen was placed in my hands. It was a head accidentally discovered, in mowing away a load of wheat in the straw. But I have said enough of this. Now let me tell you, that this much I do know; I had a field of some ten acres of wheat, that came up and grew quite large before winter set in. In the couse of the winter I had occasion to sled a large quatity of timber from an adjoining wood, across this field. My neighbors told me that wherever I made my path across the field, there my wheat would be all chess. Not believing in the doctrine, I concluded to run the risk; but harvest time told the story, and it's this, and precisely as my friends told me. I had very little wheat but a most luxuriant growth of chess. But don't throw my communication under the table in disgust yet.

There is another fact, about a part of this same wheat field, which placed matters in a different light. I had procured one quart of a new variety of *spring wheat*, and wishing to give it a fair trial, I had reserved four square rods of ground from one side of this same field, intending to give it an early plowing (though it had been prepared alike with the rest,) and then sow on my spring wheat. But living or rather staying, in an old log house, I found to my regret, that before spring the rats had made way with every grain of it. The consequence was, the four square rods of ground remained without being plowed, or in any way cultivated; and although the sled path was not within twenty rods of this piece, and not a single grain of wheat or *rye, oats*, or any other grain sown upon it, yet still I had from this same piece, *six large sheaves* or *bundles* of *chess* fully matured, and which when thrashed and cleaned, weighed to the bushel, only five pounds and fourteen ounces less than oats. I have noticed that many of your correspondents have clearly shown (at least in their opinion,) various ways in which wheat is made to produce chess. But how, I ask, (and the question is to such as believe in transmutation,) how came it about that this piece of ground which had not been sown with any kind of grain for five years, produced this crop of *chess*? Did it spring from nothing? or from seed that had lain deposited in the soil, (the result of former bad management,) and which only needed to be brought to light and heat, or near the surface, that it might vegetate? Another fact; a piece of timbered land, that I caused to be cleared in mid-winter, (lay adjoining an old neglected, though formerly cultivated field,) and on which, no grass or grain had ever grown, the next summer was covered with a rank growth of fire-weed, so called, interspersed with chess, but more particularly along the margin of the *old field;* did this fire-weed and chess spring from nothing? or from seed long since deposited? One more fact and I'll weary your patience no longer. Another field of two acres, was cleared of a very heavy growth of timber, without the least *under-brush*, and the next summer there started up a most luxuriant growth of the hazle bush intermixed with chess, as perfect as ever grew in any wheat field; now, agreeably to the doctrine of transmutation, the hazle and the chess, in this instance, must have grown from the mutilated stumps and roots of the various kinds of trees, most unceremoniously *browsed* off by the woodman's axe. I have seen nothing yet advanced that bears the semblance of *proof*, that wheat, rye, oats, or barley, can be made to produce the grain known as *chess*.

W. WADSWORTH, Jr.

Berkshires and Woburns.

Messrs. Editors—Since my return home, I have had my attention called to Dr. Martin's article on the Woburn swine, page 148 of September No. of Cultivator, in which I see he claims a great superiority over the Berkshires in easiness of keep, by quoting a couple of sentences from a communication of mine in April No. page 67, under caption of "Manner of Feeding Stock in Ohio," in contradistinction to a trial made by him with his Woburn sow Marion.

Dr. Martin will permit me to say, to begin with, that I think his supposed triumph, if triumph it can be called, is both petty and disingenuous, and his argument the same. When he shall have taken twenty-two sows in the heat of summer, averaging the weight of those alluded to, roving about ad libitum in a twenty acre arid grass pasture to feed, instead of one animal closely confined in a pen, the experiment will look a little more equal. Again, he only states but the half of my communication upon feed.

If he will condescend to look at the article once more, he will see that I was arguing against the great loss in feeding whole corn instead of grinding it into meal, and he might have gone on with a little more fairness, and added the further part about ship-stuffs. Now these only cost in the ratio of four and a half to one of corn, and yet it is my opinion that they would have gone as far in the manner they were fed, to keep swine in *store* order, bushel for bushel, as did the corn. Stating the argument in this light, the Woburn would have been beaten; but Dr. M. does not say whether his corn was fed *whole*, or whether it was made up into mush; if the latter, he can't but know, that it will make a difference of at least fifty per cent.

As soon as my article appeared, my brother wrote to me in Ohio, stating that the amount, four bushels of corn per day for twenty-two swine, was *monstrous;* that I must have been mistaken in the quantity, and wished my attention to it. I thought I had entered the experiment of feeding upon my farm journal, but on searching now I cannot find it; but the head man, who has the care of the stock, asserts that it was only three bushels per day with the corn alone, and one-half a bushel with the ship-stuffs. He is a careful, candid man, and as he was one of the two that assisted in feeding it out, I have no doubt that he remembers better than I did, with so many other affairs upon my mind; but be this as it may, after making the assertion, *I am willing to abide by it*, mistake or no mistake. But Dr. Martin will have the goodness to make a similar experiment, on an equal number of Woburns, of equal weight to my Berkshires, in the month of August, and on dry, hard, old, whole corn. What led me to make this trial, was the seeing in the manure of my animals quite half of their food come out whole, and lie rotting upon the ground: my argument went to show, that there was great economy, at least with us here, in grinding the grain before feeding it.

But another trial that I made in keeping Berkshires was last March and to middle of April, in Ohio. Eleven head of sows, weighing from 303 to 384 pounds, averaging probably 350 pounds each, were kept without shelter in an open field, when no grass had started, by Mr. Joseph Sullivant of Columbus, for me. The direction to his man Cyrus, was at first to feed them one bushel per day; but on this it was soon found that they were gaining too rapidly for good breeding, when they were cut down to three-fourths of a bushel per day, and still on this it became apparent that they were getting too fat, and had not Mr. Mahard of Cincinnati, came up and purchased most of them, 14th April, I should have then cut them down to one-half a bushel per day, which, in the opinion of Mr. S. and all who saw them fed, would have been amply sufficient to have kept them in good breeding order. The kernels of the Ohio corn being much larger and softer than ours at the north, I found that the swine ground it finer in eating, and more easily and thoroughly digested it than during the preceding August when fed at home; there would, of course, be the same, or perhaps a greater, difference in favor of Kentucky whole corn.

Allowing Dr. Martin's weight of 55 pounds to the bushel, this would have been just five pounds per day each, when fed one bushel. At three-fourths of this amount, it would have been three pounds twelve ounces each per day; and at one-half a bushel, two and a half pounds. Marion, a young eleven months Woburn sow, it seems eat a fraction over four pounds ten ounces per day, sheltered and close confined, which all know makes a great difference in favor of a less consumption of food. I am sorry that I cannot add the amount of gain of the above animals during this time. I only know their weight when sold, as we were obliged to weigh them before going on board canal boat for Portsmouth, to render the same to the collector on which to calculate the tolls.

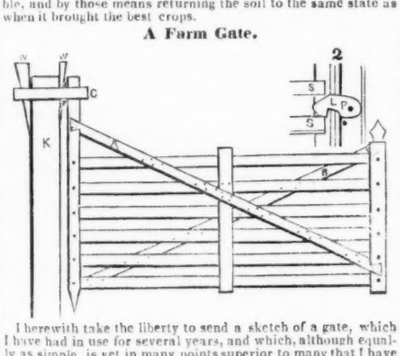
As to all the other of Dr. Martin's experiments, Woburns *vs.* Berkshires, I will add, that I consider them as really too trifling to have been made that detail of in the agricultural papers that he has seen fit to do. His feeding against Mr. Fanning, of the Tennessee Agriculturist, was thus: Mr. F.'s pigs were from the first litter of rather a small *young* Berkshire, while Dr. Martin's was from a large *old* one, of course the latter had the advantage all in his favor, even supposing that the breeds had been the same; joined to this, he is a much more experienced feeder than Mr. F. which makes another wide difference. But it seems that Dr. M.'s Woburns have been easily beaten on his own principles, at least once this season; see late Nos. of the Cultivator; and Mr. George Hezlep of Ohio, gave me the weights of three pigs at eight months three days old, a cross of the Berkshires on the common hog of the country, that without any particular pains, weighed, respectively, 300, 312, and 318 pounds. Bernice, four days older, weighed 334 pounds, fed with all possible art, probably wheat bread and milk, and sugar, lard, fat, boiled mush, meat, &c. For the trial of feeding, gain of most pounds for their food, page 179 of November's Cultivator, detailed by Mr. Weathers, it seems there were two against one, and it might be about as fair as the poor miserable stunted Berkshire boar that Dr. Martin keeps, as I am told, and shows off against his great fat Woburns. Before this reaches the press, I shall probably have made a flying visit to Kentucky, when it is my intention to look over the Woburns, and if their advocates are desirous then of making a trial against the Berkshires, if I can get a few of my late imported ones safely on, they will find me quite ready to feed their stock and crosses on the Ohio hog, in any sort of fashion they may please, either weight against consumption of food, or weight against time. But for my own part, I am yet to learn what Woburns are. Those bred formerly on the Duke of Bedford's estate, have long since run out, and when in England, I saw more than twenty different kinds of hogs called by this name, and the same will be seen here in our own country, and by Dr. Martin's figures of his swine exhibited in the late Nos. of the Cultivator, they are just as various in shape and appearance as there are different animals represented. I have conversed with many persons from Ohio and Kentucky, who have repeatedly seen Dr. Martin's Woburns, and also kept them, and out of all, I only found two who advocated them in preference to the Berkshires, and these two persons simply because they were the largest; but now those who have seen one of my late importation, Windsor Castle, say that he is as large as the largest of Woburns, and infinitely finer in all his points. He started a few days since, under the care of Mr. Hendrickson of Middletown, Butler county, Ohio, and if the Woburns have any boasts to make now, if he gets on safe, he will be close in their neighborhood; let them come on and show themselves; he is quite ready, out of condition as he may be, from his long voyages. Hagbourn, and some young ones yet unnamed, will remain here, and I fancy when full grown, they will not be afraid to *fash* their beards along side of any thing short of a Kenilworth.

Truly yours, A. B. A.

Culture of Wheat.

Messrs. Gaylord & Tucker—A few words on the culture of wheat. As that is, with many, the principal article of produce and profit, those means should be used which would secure the greatest yield of grain. How often do we hear it remarked, that the land does not produce the crops of wheat that it once did, and they wonder what is the cause. One says, "the land has become too poor." Another, with Mr. J. Johnston, in the July number of the Cultivator, remarks that it "is getting too rich for wheat," "the best of wheat land here is getting too much clover, barn-yard manure," &c. Now I am satisfied that they are both partly right. The land is, in too many instances, getting *too poor*, by a miserable system of farming, or rather by no system at all; the land is nearly worn out before any manure is thought of, one crop after another is taken away without the least idea of returning any thing to the soil; and after years of such culture, the farmer is surprised that the yield is not so great as formerly. Again, in one sense the land *is getting too rich for wheat*. By another but false system of farming, and by a misunderstanding of the true use of manures, a succession of crops is taken from the land, and clover, barn-yard manure, &c. bestowed liberally in return: by those means encouraging a large growth of straw, not considering that that which enters very materially into the formation of the berry, lime, and of which large quantities are removed with every crop of grain, is not returned to the soil. Evidently the only true system of manuring would be that which would return to the ground those substances which the growing crops absorb, in as nearly the same proportion they are removed as possible, and by those means returning the soil to the same state as when it brought the best crops.

A Farm Gate.



I herewith take the liberty to send a sketch of a gate, which I have had in use for several years, and which, although equally as simple, is yet in many points superior to many that I have seen. Its peculiar construction effectually prevents the settling of any part of it, and by its simple hangings, the gate itself can be speedily adjusted, should the post be moved by frost or otherwise. The slats and braces are made of 1 inch stuff, 4 inches wide. The brace A, is let in on the face of the two end pieces in a dove-tail form, and nailed. The brace B, on the opposite side of the gate, is also let in its own thickness, but the ends are sawed square as dotted in the figure. The end pieces are 3 by 4 inch scantling, one 5 feet 4 inches and the other 3 feet long, and the space between the slats is as follows, beginning at the bottom—4, 4, 6, 8 and 10 inches, which will make the gate 5 feet high. The gate is hung by its bottom, being set into a piece of timber which is morticed into the posts just at the surface of the ground, and by its top being let through the piece C. The top of the post K, is made into a tenon 1 inches thick, and the cross piece C, has a corresponding mortice of sufficient length to admit of the two wedges W, W, which are intended to raise or lower the gate. The latch is also of wood, of which a side view is given at 2, which shows the gate nearly shut. The end of the gate is intended to shut against the post, so that the latch which works loosely on the pin P, may play between the slats S, S. Its shape is such, that as the gate shuts, the lower one of the two slats raises the latch, until it is past the notch, when the upper one forces it down, thus always preventing the gate from flying open when suddenly slammed shut. This latch too, effectually prevents the gate from being opened by hogs or cattle.

A. V. D.

Clayton county, Iowa Territory, 1841.

Importation of Cattle.

Messrs. Editors—I have read with some interest Mr. Allen's sketch of what he had done during his trip to England, given in the last number of the Cultivator, and wish to express my conviction of the general justness of his remarks on the subject of Short Horns and Horses. Of the first, he says, "of the Short Horns I brought nothing for fear of the disease so prevalent throughout England; and because there is but one man's herd there that can improve our own;" and of the second, he adds, "for horses, England ought to come to us. She has nothing that can compare with our famous trotters; and our Dutch Pennsylvania wagon horses are far preferable in my estimation, to her boasted cart horses."

It has been matter of surprise to me, that the subject of danger from the introduction of the disease which has been for two years so fatal to cattle in almost every part of Great Britain, by the importation of animals infected, has not been sooner brought before the agricultural public. I venture to assert, that should the epidemic appear here with the same fatality as there, the damage to the country would be estimated by millions of dollars. It was years in traversing Poland, the north of Germany, &c. before it found its way into France and Britain, and in the last of these countries it has been much more destructive than in the former. It appears, like the cholera, to have traveled westward, although the place of its origin is unknown. At the close of 1840, it seemed to have mostly passed from England, but still raged in Scotland and Ireland; but the London Veterinarian of September, a work of authority, now before me, says, "with regard to the epidemic among cattle, sheep, and pigs, we regret to say, that in many parts of the country it has appeared afresh, and is as virulent and infectious as before." Of the infectious nature of the disease, the instances given in the Veterinarian are perfectly conclusive, and the cause of its reappearance is thus stated: "A great number of Irish and Scotch cattle are brought into this country (England) twice a year—in the autumn for the strawyard, and in the spring for grazing purposes. These cattle arrive in large droves, and are sold to a great many farmers in small lots. There are very few of these droves among which some diseased cattle are not to be found; purchasers take these infected cattle, ignorant they are thus diseased, and the infection is thus communicated to whole herds. These droves have been the means of the disease spreading wider and more rapidly than all other causes put together."

The following extract from the circular prepared by Professor Sewall, at the request of the Royal Agricultural Society, on the nature of the epidemic, &c. will show the usual appearance of animals attacked. "The attack does not always commence in the same form, but ultimately terminates in a general disease of the same type and characters. In some animals it commences in the feet between the claws, and in others it appears to have begun in the mouth; in others stiffness in the legs of the animal is first perceived, as if treading upon thorns or briers; then follows a discharge of saliva from the mouth, and a champing of the lips, accompanied with blisters on the tongue, palate, and lips; the blisters peel off, loss of appetite, general debility, and not unfrequently death ensues."

From the description here given it would seem to have resembled the disease called the black tongue, which was so fatal among horses a number of years since, (and which by the way, according to the English journals prevailed extensively in that country in 1836,) but which did not here extend to other animals. A number of instances are reported, in which the meat of diseased animals has been sold with fatal effect to those who partook of it in England, thus proving that like some other diseases of animals, the glanders for example, it may be communicated or prove poisonous to the human subject. It has occurred to me that the case of mortality in calves, recorded by Mr. Merrick, at page 176, of the current volume of the Cultivator, does not vary essentially from the disease as it has appeared in Britain, according to the foreign journals. I may add that the disease developing itself so rapidly as to render it nearly impossible an infected animal should reach our shores without exhibiting the complaint unequivocally, will be our great safe guard so long as the frequent importation of animals continues; and I will suggest that no new imported animal of any kind, cattle, sheep, or swine, as all these are attacked abroad, should be suffered to run with others, until a sufficient time has elapsed to prove his freedom from the prevailing epidemic.

The same danger from disease, does not exist in the importation of horses, as in that of cattle; but the necessity, for the sake of improvement, it is clear to all who have seen the best specimens of imported horses, or traveled abroad, does not have an existence. There cannot in England or Scotland, be found a breed of horses equal for both road and field labor to the Morgan horse of Vermont, or the Pennsylvania team horse. To be at the expense of importing is idle, when we have superior materials at home, which was not the case with our cattle, sheep, and swine. As to the race horse, I consider him out of the question. The less we have of them the better; and Prof. Lindly never uttered a more indisputable truth, than when he said that "if racing improved horses, it deteriorated mankind." There cannot be an instance pointed out in which a valuable breed, or even a valuable permanent cross has originated from the modern race horse proper. Their structure demonstrates their worthlessness for any thing but the turf, and there let them remain. In the United States, the horse wanted is one, of which a span will plow of turf land three-fourths, or an acre per day, or travel thirty miles a day with forty bushels of wheat; one possessing form, weight, wind, activity, and such we have already, and may multiply and improve at our pleasure. As a farmer, I have looked at the success of our importations of useful animals with pleasure, because I saw in them the foundation of immense agricultural improvement; but it is a peculiar trait of American character to overdo a good thing, and I am not certain we are not approaching that pient in our rage for importations. At any rate it may be well to pause and look about a little, count the cost and estimate the probable results. Occasional importations may be needed for the purpose of crossing; but we have breeds of all improved animals, of such widely different origin, that if our breeders understand their business, deterioration can hardly ensue; on the contrary they start on a high vantage ground, and if they fail, it must be through their own remissness.

An Ohio Farmer

Address of Humphry Howland,

President of the Cayuga County Agricultural Society, at their Annual Fair, held at Auburn, Oct. 14, 1841.

My Brother Farmers an Fellow Citizens:—Agriculture is the most dignified vocation of man, for which we have the highest authority. Our primeval ancestor, after receiving the magnificent domain, the whole earth, was placed in Eden to dress it. Man left to himself would have lived on its spontaneous productions, or the chase, but he was to have the delightful occupation to till the soil. Nations in proportion to their civilization, advanced in agriculture. The King of Persia, every vernal festival, addressed the farmers to the following effect, "I am one of you; my subsistence and that of my people, rests on the labor of your hands." From Egypt the art passed to Greece. Some of the most distinguished Romans were versed in agriculture, among whom were Cato, Cicero and Cincinnatus. Virgil has left us a beautiful practical description of rural occupations. In England, Dr. Johnson has written at large on the subject, which Thomson and Bloomfield have glowingly described. Penn, who had seen much of men and things, expressed to his children that he preferred an income of £100 in the country to £1000 in the city. In our own country, Washington was the largest, best practical farmer of his day. Madison was a practical farmer on a large scale, for twenty years, and a president of an agricultural society. Mount Vernon, Quincy, Monticello, Hermitage, and the North Bend, were well cultivated by their illustrious proprietors.

In England formerly the Ox weighed less than 800 lbs. now more than 2000 lbs. Extensive progress has been made there in agriculture within half a century. Tull prompted it, Bakewell improved live stock, the persevering labors of Sinclair accomplished much, and above all on the establishment of a National Agricultural Society, a laudable emulation seized all ranks. That board brought forward a great number of new men whose names otherwise would not have been heard of. They were practical people; it made distant farmers acquainted, and increased one-fourth the comforts of life. Our County and State Agricultural Societies, if attended to, will make our march onward.

Cayuga County, which we have to cultivate, contains 697 square miles, with less than one square mile of waste land; nearly every other part is suitable for a garden. Lime stone, calcareous soil, a never failing indication of fertility, surfaced moderately variegated, undulating east and west. Poplar ridge rises 700 feet above the beautiful Cayuga lake of pure water stocked with trout, which in the middle is 700 feet deep. The surface is 370 feet above tide-water, so the bottom is 300 feet lower than the surface of the ocean. Thirty miles of the Cayuga does not freeze over, one winter in seven, and then only for a few hours. The Owasco lake lies within this county—well described in "Ensenore." We have large mines of Gypsum, on examination pronounced by Professor Vanuxem of the best quality, and salt springs from which are manufactured salt superior to that of Salina. Those minerals are of more value than mines of the precious metals. A climate salubrious and mild, in which the peach flourishes luxuriantly.

This county was the seat of the Cayuga nation and produced renowned chiefs. Those in modern times were Cornplanter, Fishcarrier, and the pathetic, eloquent Logan. This tribe was one of that remarkable confederation, or Six Nations, who conquered and held in subjection the aboriginees from the Atlantic to the Mississippi, and from the Gulf of Mexico to Hudson's Bay. What did it avail them? *Barbarism*. Had they occupied their mental and physical faculties in cultivating this beautiful country, *we should not have been here*. They are gone—not a trace of them remains. There are some ancient ruins indicating a previous people; a small one on a hill in this village, and a chain of them east and west near the trail of the Six Nations, and the present traveling ground of the states, by turnpike, canal and rail-road. This people, who, according to the tradition of the Six Nations, they drove out seventeen centuries ago, after a war of 100 years. So it seems we are the third race. If those had their faults, they also had their virtues—we will not only tread lightly on their ashes, but drop a tear as we pass. Let us remember this instructive precept, that like causes will produce like effects. What happened to those nationally, will happen individually to such of our descendants, as do not occupy their mental and physical powers, and the fair domain which they inherit. They will be wandering in a foreign land.

In 1779, Gen. Sullivan marched by the way of the Susquehannah to the head of Seneca lake. A detachment from his army passed through this county, drove the Indians to Canada, burned their wigwams and cornfields, from which some of the soldiers selected large ears of corn and carried them in their knapsacks to New-England; an advertisement in legible characters of this fertile country, which subsequently profited by it.

In 1784, the United States held a treaty with the Six Nations at Fort Stanwix; four of them had taken sides with Great Britain in the late war, and were considered a conquered people. Many were for confiscating their lands, but the humane feelings of Washington revolted at such a measure. But the hatchet was not entirely burried. Judge Benson, a commissioner for treating with the Indians, informed me, that there were remarkably well defined boundaries every where existing and understood between those tribes, except the mouth of Oswego river, the whole of which, with the fishery, the Oneidas claimed, and likewise so did the Onondagas. The comissioners observed to them, "How is this? you both claim the river." "Yes," they replied, "that has been a subject of difference between us for ages, but you purchased of us both and you will own it." The ten years following that treaty was full of stirring events relating to this country. Massachusetts directly sent out its agents to claim Western New-York, by their ancient charter. Persons in the lower part of this state, were negotiating with the Indians for a lease. In 1786, this state ceded to Massachusetts the property in the soil west of a meridian which was drawn through Seneca lake. In 1787, J. Livingston, Ryckman, and associates, obtained a lease from the six nations for 999 years, including a large portion of the western part of this state, which the legislature at their next session in effect declared void, as the constitution prohibited individuals from purchasing lands from the Indians, a lease for that time being considered equivalent to a purchase in fee; but the Lessee Company, as they were styled, persisted and invited settlers.

Early in the spring of 1789, R. Franklin and a few others with their families set out from the disputed lands claimed by Connecticut in Pennsylvania. From the Susquehannah they traversed the forest to the head of Seneca lake, descended it in bateaux through the outlet into Cayuga; then up the lake to where the village of Aurora now stands. This was the first settlement by the white inhabitants in this county. It had been the site of an Indian town. They were followed the same year by Richardson and others, who settled north along the east side of the lake under the Lessee Company, and surveyed it into townships six miles square. This State also commenced surveying this county, laid off the Cayuga Reservation, on which those settlers had located, and appropriated the adjacent lands to be granted, one lot of a mile square to each soldier of their standing troops in the Revolution. This appeared well in theory, but in the sequel caused much litigation of titles, and only about one soldier in fifty retained and settled on their lands. The other soldiers sold their lots for about $25 each, which in their present improved state are worth from $30 to $60 per acre. In a year after the first settlers arrived, the Indians returned from Canada. Our affairs with them were in a most unhappy state. Gen. Harmer was defeated by the Indians about that time, north of the Ohio. They complained to our State government of the intrusion on their reservation. The Governor sent the Sheriff of Herkimer county with the posse comitatus, who burnt out those settlers in October, 1790. They then settled on the military lands, which progressed notwithstanding fear; as an Indian war, fierce and bloody, raged south of Lake Erie, at no great distance. In 1791, Gen. St. Clair and army were disastrously defeated by the Indians. All the sympathies of the Cayugas who had not been satisfied with the late treaty, were with their brethren of the west. Our pioneers endured many hardships and privations; often without meat and sometimes without bread; and when their little crops were gathered, were destitute of mills, the stump of a felled tree excavated served as a mortar, and was a substitute for the mill. They were united, rejoicing in the prosperity of each other. I see some here who can recollect this place when it only contained a cottage, built with clay and sticks, by J. Hardenburgh, and a log tavern by W. Bostwick. The cottage yet remains in Market-street, but enclosed in a new dress, is hardly recognized by its old acquaintance. The settlement progressed rapidly; a turnpike was made, and that grand work the Erie Canal, after a lapse of years, was commenced in 1817, by the enterprise of De Witt Clinton, and other distinguished men, who are mostly gone; which in effect as to the cost of transportion has brought this county within 30 miles of tide water, and gave accelerating stimulus to agriculture. And lastly, was constructed by individual enterprise, the iron road.

The aggregate value of the articles arriving through all our canals at tide-water on the Hudson river in 1840, was $23,212,573, and there were the same year exported exclusively from Cayuga lake, first entered at Montezuma, $1,780,100, half of this flour and wheat; butter and lard, $153,000; Pork, $94,000; wool, $71,000; the balance in lumber and sundry articles. That from Cayuga lake alone is equal to one-twelfth of all the exports through all our canals, from Lake Champlain, Vermont, this State, Ohio, Michigan, and the far west.

The population of this county by the census of 1840, was 50,362, which is 72 persons to a square mile, now a denser population than Connecticut, and a capacity to sustain quadruple that number following their present occupations. Yet numerous emigrants scattered over the hills and plains of the west, have reluctantly gone forth from every neighborhood among us, not with a view to find a richer soil or more congenial climate, but to enlarge their borders, some of whom could say, "with my staff I passed over this Jordan, and now have I become two bands." A farmer having 100 acres with several children and grand-children, not having the capital to settle them here, sells his land for $50 per acre, purchases in the west for one and one fourth dollars, settles his children, who after a lapse of years return strangers to revisit their native roof, and the graves of their ancient departed friends. There are in this county about 260 public schools in which are taught 14,721 scholars. Three flourishing academies. One Theological seminary, and the Regents of the University have granted a charter for a college at this place. Such is the system of education which exalts society; and agriculture flourishes best where the people are best educated. The temperance societies have done much for the cause. Our harvests are now ingathered without alcohol, an article now hardly creditable to use.

In 1825, by the State census, the population of this State was 1,164,488. A meridian then drawn five miles west of Canajoharie, would divide the inhabitants into about two equal portions. In 1840, the population was 2,534,136, and a meridian now drawn five miles east of Utica, would divide the inhabitants into two equal portions. That meridian is *traveling* west, and in a few years will probably rest in this village, entitling it to the capitol, an event to this county to be *anticipated*. When we take a retrospective view of what has been accomplished, we have every stimulating encouragement to *persevere* in improving this county, every part of which is rising into notice.

On the details of agriculture I shall be brief, because volumes would be required to describe it; nor do I profess to understand it, although I have given it much thought for many years, and have been trained to it from childhood. It is a living science, susceptible of improvement in every age. It is included in three *principal rules*. First, that the soil ought to be dry, or in other words, free from all superfluous moisture. Secondly, that it ought to be kept clean, in other words, free from noxious weeds. Thirdly, that it ought to be kept rich, or in other words, highly manured.

I am anxious to impress upon the society the importance of the first rule. Our county particularly requires it. Even our hill lands would be much benefited, the declivities and vales ameliorated by open ditches to conduct off the surplus water, and blind ditches, the water from the soil. This system is obtaining with good farmers, which will abundantly improve our rich soil and salubrious climate. The frost of winter performs an important operation by leaving the soil pulverized and spongy, easy of access to plants which send out tender roots to gather nutrition. But if there is early in the season a superabundance of water, it settles the soil down, an unfavorable compact mass. A considerable portion of each of a few succeeding years should be appropriated by every farmer for drainage, will prove an investment worth 20 per cent per annum. Although water is indispensable to vegetation, too much of it is as hurtful as too little. It is necessary to germination of the seed, to the decomposition of vegetable matter in the soil, to transmission of the food from the soil to the plant, to its circulation. But when water remains in the soil to excess, the vegetable matter remains insoluble, in consequence of the absence of heat and air.

The 2d rule, with regard to noxious weeds, I am sorry to have to acknowledge that the Canada thistle, St. Johns Wort, (Hypericum perforatum,) Red root, (Lithospermum Arvense,) &c. are invading our fields. Those weeds must be extirpated. Summer fallow particularly in dry seasons will destroy the Canada thistle, if when it makes the least appearance, or rather previous to its being expected plow it once in ten days for half a dozen times. If it cannot respire during that time in summer, it must die, and a remuneration for extra labor in the well prepared ground, will be reaped the next harvest. The free use of plaster will drive out St. Johns Wort and daisy with the usual rotation in crops.

For the 3d rule, we have inexhaustible materials in those invaluable minerals, plaster and lime stone. They should be more used; they will increase the quantity of hay and straw, the basis of manures; the sub-soil contains lime, it would be beneficial to loosen it up. Beds of marl 4 feet thick nearly pure, shells partially decayed, within 4 feet of the surface, underlay 10,000 acres along the Seneca river, which was formerly a part of Cayuga lake, now filled up. This marl will be extensively used. A good farmer will turn every attention towards enriching the soil.

As to the material for fencing, we are not as well provided. Locust trees should be planted along the borders of our numerous roads, which would require no land from our enclosures. They are ornamental, affording a cooling shade. The grass is sweet under the acacia, the timber enduring, and although the insect has severely attacked it for the last five years, I observe that most of the trees are gaining the ascendancy. They are not injured after they attain six inches diameter. And we may remember the *fact*, that hurtful insects only prevail a very few years at a time. They have their day, and disappear for a long interval of years, or forever. The borer has long since disappeared in the southern part of this state; no longer there injurious to the locust.

Wheat is our staple and most important product. It is found on analyzing to contain more saccharine matter, than southern wheat. We may expect a heavy crop, if we repeatedly plow deep, and manure with clover and plaster, or other material; sow as early as the first of September, or before, with 2½ bushels per acre; a less quantity of seed would cover the ground with plants, but offsets or suckers are not as vigorous as the parent stock, which will have a longer head. Seeds of all kinds should be skillfully selected.

Injurious fluctuations in prices may in some measure be *prevented*, or profitably available. When produce is at a low price, not a fair remuneration, farmers should not remit growing it, but persevere in keeping their past crops of wheat in various methods. If well stacked it will keep with trifling loss in good condition for three years, until a good market offers, which never has failed after a while to occur. This would also be found to be a public benefit to equalize prices.

Our *Cattle* want improving. Those superior animals lately introduced into this county, by J. M. Sherwood, are a valuable race, a public acquisition, and merit attention, as well as an eligible selection from our native stock. The Merino brought from Africa by the Moors into Spain, hence by Humphries to Connecticut, and in 1806 introduced into this county by J. Coe, and subsequent additions by others, is also a valuable acquisition. They are a healthy sheep, but require shelter in winter; indeed sheds are indispensable for all our cattle. And here let me speak a word for that useful animal the horse, and call your attention to building more sheds around your meeting-houses to protect him from the burning sun and pelting storm. In traveling through a county where we observe houses of worship in good order in every settlement, there agriculture flourishes.

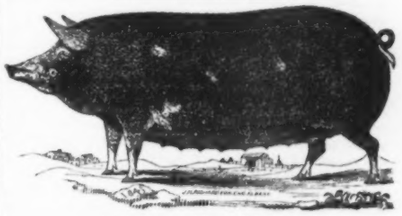
The Mechanic arts are the handmaids of agriculture. They have made rapid advances within a few years, and will continue to do so, by the aid of our system of education and machinery. They now rival older countries. All agree that we ought to *manufacture* the produce of *our own soil*, forest and mines, for *our own use*. All prosperous nations in Europe, prohibit by heavy duties the introduction of such articles as they can grow or manufacture. They will no doubt take care of themselves, and if we do not take care of ourselves, we shall come poorly off. If our government should, by countervailing duties protect American industry, every citizen would be benefited. Experience has abundantly proved, that domestic competition, machinery and skill, furnishes articles cheaper to the consumer than those from abroad.

Agricultural implements have been improved and others introduced within a few years. The threshing machine. For the cast iron plow, the public are much indebted to the ingenuity of the late Jethro Wood, of this county. The revolving horse rake, invented by a colored man, abridges the labor of haying one-fourth. No farmer should be without one. Farther improvements are wanting. A machine for spreading hay, and another for mowing and reaping, have been put in operation, which in time will succeed.

A word to my young friends. Do not crowd into the professions and trades; they are overdone. It has been supposed by those who have long observed the course of things, that to take 40 lads, divide them, all things considered, into two equal companies, place half of them in the professions and merchandise, the other half in agricultural pursuits; the result will be, after a lapse of years, the latter will have the greatest aggregate wealth, diffused among the whole; while perhaps a fourth of the former may make large acquisitions, the families of the other three-fourths may be found in rather straitened circumstances. It is the opinion of those who have long held situations favorable to such observations as to enable them to come to correct conclusions on this subject, that only one in four of the trading classes, perhaps from causes beyond their control, escape insolvency, or are successful in the professions. Is it not strange that young men are willing to enter into schemes where only one in four succeeds, while the farm is like the inexhaustible cruise of oil. We are directed to draw from the constantly productive earth, a bank which may be drawn upon at all times, and will not fail while seed time and harvest remains. It is the main spring that sets the whole machinery in motion. Therefore apply all your energies with increasing vigilance to rural pursuits. The brief period of youth is invaluable. Take each day into the account. It is barely sufficient to lay the superstructure of literary education, and habits of manual industry. The edifice must be raised by the assiduous attention of after years.

And here permit me to remind my female friends of the high responsibility resting upon them. On you devolves the care and training of the infant mind. That most important period for forming the habits and principles of the *man* is confided to your care and superintendance. Remember it is your duty as well as privilege to imbue the youthful mind with high toned morals and love of virtue.

And having sown the seed in the mellow soil, and done all, let us remember to look up to that benign Providence, who alone can bless the labors of the Husbandman.



Berkshire Pig.—(Fig. 94.)

Messrs. Gaylord & Tucker—Accompanying this is a drawing of "Hetty," a Berkshire pig in our possession, six months old, weighing 190 pounds, and a beautiful specimen of this breed. She is from "Lady," (a portrait of which we will send you at some future time,) a sow from the piggery of A. E. Allen of Buffalo, a real lady of the hog kind, not very large, but very fine in all her points. I think that "Hetty," with Dr. Martin's scientific feeding, would nearly equal in size, and quite excell in beauty, his celebrated "Bernice." Her food has been cornmeal, with bran and soaked corn. W. & F. SCOTT.

Maumee City, Ohio, Oct. 20, 1841.

Messrs. Gaylord & Tucker—I see it stated in the Cultivator, that the Hon. G. V. Sacket of Seneca Falls, bred my two year old bull that took the first prize at Syracuse. Now I think I bred him myself. I bought the mother, when a yearling, from Judge Sacket, and paid for her; the next season she had this calf, sired by a bull raised by Thomas Weddle, Esq., from his pure imported stock, and bought at his sale by Judge Sacket. Now if my bull was not bred by me, he could not be bred by the Judge, as the heifer I bought from him was in her mother's belly, *Silvia*, when he bought her from C. N. Forment, Esq. of or near your city. Yours respectfully, JOHN JOHNSTON.

Near Geneva, Nov. 9, 1841.

"Advancing Backwards."

A most singular controversy for the year of our Lord 1841, is at present going on in Great Britain. It is whether the great mass of the farmers and breeders of cattle shall be kept in ignorance, that a few men, called horse or cattle doctors, may be benefited. The Veterinarian, a magazine conducted with great ability by Messrs. Youatt, Dick, Percival, &c., the most celebrated veterinarians in that kingdom, has been in the habit, while describing the diseases of animals and the means of relieving them, of giving the symptoms, medicines, &c. in such terms and language as would be understood by every well informed man, and of course rendered their labors available to all. Their object has been to divest the treatment of sick or disabled animals of the mystery which interested farriers have long thrown around it; in short to do away the quackery which in that country, as well as this, is so common among cattle or horse doctors. This course has long given dissatisfaction, with the numerous practitioners in a small way all over the kingdom; since, as the farmer was enlightened in the nature of diseases and their remedies, their services in curing sick animals would be dispensed with. The breaking out of this feeling occurred when Prof. Sewell, of the London Veterinary College, at the request of the Royal Agricultural Society, drew up his account of the epidemic so fatal to cattle, sheep, and swine, in England for some three years past, with the best course of treatment and remedies, and circulated it in all quarters of the island. The dealers in quack specifics, nostrums, holy water, &c. and who were profiting largely by the credulity of the many, saw their craft was in danger, and raised the cry against the diffusion of such knowledge among the people; and strange to say, some from whom better things might have been expected, have joined in this crusade. The ground openly taken, as appears from the last number of the Veterinarian, "that if the people, the farmers, are taught to cure their own cattle, the veterinary practitioner must lose his fees, and be compelled to resort to labor or something else to live." To prevent this, an "Association" has been formed, the proceedings of which are to be published, but in such a way that none but the initiated will be benefited, or able to avail themselves of the remedies or means of cure proposed. We venture the prediction that this attempt to shut out light from the many will not succeed; if it does, all we have to say is, those who submit to such impositions, deserve the yoke.

COMPARATIVE VALUE OF FUEL.—Several years since Mr. Marcus Bull instituted a series of experiments, founded on those of Count Rumford, in regard to the quantity of heat given out, and the consequent value of the different kinds of fuel for economical purposes. The result of the whole was as follows:

Hickory,	4 cords	Soft maple,	7 1-5 "
White Oak,	4 3-4 "	Pitch pine,	9 1-7 "
Hard maple,	6 2-3 "	White pine,	9 1-5 "
Anthracite coal,	4 tons.		

Thus it seems four cords of hickory give out as much heat as 4 tons of coal, 6 3-4 cords of maple, or 9 1-5 cords of pine. A knowledge of these facts might aid those who purchase their fuel, in determining which is the cheapest for them, at any given time.

HIGH MANURING.—That eminent farmer, E. Phinney of Massachusetts, says—"From no item of outlays can the farmer derive so complete, or so certain a profit, as from his expenditures for manure, to a certain extent. This has been most strikingly verified by some of our West Cambridge farmers. It is not uncommon among some of the farmers of that town, to put on their gardens one hundred dollars worth of manure to the acre; and in more cases than one, the gross sales of produce from ten acres under the plow have amounted to five thousand dollars in one season. This is the result of high manuring and the judicious cultivation of a soil, too, which is exceedingly poor and sandy."

TURNEP SEED.—The growing of turnep seed is a business of much consequence in Great Britain, and great pains are taken to produce that of the best quality. Mr. Imrie of Ayrshire, a seedsman noted for the quality of his turnep seed, had this year 20 acres cultivated for turnep seed alone. Mr. Imrie's great improvement consists in drying the seed on the straw of the turnep, suspending the crop on ropes in the field until it is fully cured and fit for thrashing out. Seed so prepared does not injure in the storing, as it sometimes will when cured in the ordinary methods.

WOOL IN AUSTRALIA.—Perhaps the records of any country do not furnish an instance of more rapid increase in the production of wool, than the original convict settlement of Australia. We say original convict settlements, because, though such at first, they are now the chosen point of emigration for multitudes in England, offering advantages which it is thought the Canadas do not possess, for successful agriculture. In 1807, the whole quatity of wool grown in Australia was only 345 lbs. In 1839, it had increased to 20,128,774, equal to one-fifth of the whole consumption of Great Britain. A large part of this wool was exported to England, and the trade in Australia wool is becoming rapidly of great consequence to both countries. We see too, that a large number of the finest improved stock sold at auction at the late Fairs in Britain, has been purchased for that region of our globe.

The New-York Market.

MONTHLY REPORT FOR NOVEMBER.

(*Prepared for* THE CULTIVATOR.)

ASHES.—At the close of the last and the commencement of the present month Pots were dull at $6·12½ @ $6·25, and Pearls at $5·75. The latter have been inactive throughout, but closed without change in price; the former declined to $6, with occasional sales at $6·12 1-2, and a moderate demand. At the close, however, more firmness was evinced in consequence of favorable advices from abroad, and considerable sales were made at $6 @ $6·12 1-2, mostly at the latter rate, at which they are still freely offered. Receipts from the commencement of the season to 19th November, 31,077 barrels of both kinds. Exports for October, 1,564 bls. Pots, and 300 bls. Pearls; do. in November to 17th instant, 1,041 bls. Pots, and 136 do. Pearls.

COTTON.—Holders during the month have submitted to a decline of about one-half a cent per pound with a fair business, though mostly for home use. The market closes heavy. We quote New-Orleans, 8 @ 12c.; Alabama, 8 @ 11 1-2c.; Florida, 7 1-2 @ 10c.; and Upland 7 1-2 @ 10 1-4c., though it may be remarked that occasionally small parcels are obtained at something under these rates. The last advices from abroad were not considered favorable.

FLOUR AND MEAL.—In consequence of some foreign demands and the anticipation of a short supply for the winter, Flour has advanced since the commencement of the month about 62 1-2 cents per barrel, but closes very heavily at the enhanced rates. We now quote Genesee, $6·75; Ohio, $6·62 1-2 @ $6·75; Troy, $6·62 1-2 @ $6·68 3-4; Michigan, $6·86 1-4 @ 6·62 1-2; and Southern $6·62 1-2 @ $6·75. About 12,500 bbls. were exported from the 1st to the 17th, and we should think about 10,000 more are in process of being shipped. Rye flour is 50 @ 75 cts. higher, with a fair demand and very scarce. We now quote $4 @ $4·25, and Corn-meal $3·12 1-2 @ $3·25, which is the same as before reported.

GRAIN.—The supply of Wheat has been moderate, though about equal to the demand, consequently prices have not materially varied from those current at the beginning of the month. Upwards of 30,000 bushels Western via New-Orleans have been received and partly sold as follows: 2,000 for export at $1·40, and since 15,000 for milling, at $1·37 1-2. Southern brings $1·32 1-2. Rye has been scarce, and wanted for distilling for a considerable time past. We quote Northern 75 @ 77 cents, an advance since your last of 8 @ 10 cents; 2,500 bushels Odessa, in store a year, sold some time since at 68 1-2 cents. Barley has advanced from 59 @ 60 cents (at which a parcel sold on the 1st) to 75 cents, with considerable sales. Oats has varied from 49 1-2 @ 52 cents, closing at 51. There is no Southern or Jersey here. Corn has been quite uniform, but as the time for the receipt of *new* has arrived, has now become dull. Five hundred bushels *new* Northern brought 65 cents, weight at the boat, but that price could not probably be obtained for more. We quote *old* at 70 cents, and Southern 67 cents, both measure. Black-Eyed Peas continue plenty, and sell in lots at $1·12 1-2 cash.

HOPS.—The transactions have been very unimportant, and although there is some inquiry for export, we have heard of no important transactions for that purpose. Western, of which the stock is small, may be quoted at 16 cents, and Eastern 18c., with small sales of both descriptions.

LEATHER.—In consequence of the prevailing disposition to force Leather by auction, prices have receded 1 cent per pound since 1st November, during which time five public sales have taken place. Light may be quoted 21 @ 21 1-2, Middle 19 1-2 @ 20 1-2, Heavy 17 3-4 @ 18 1-2, Damaged 15 @ 16 1-2, and Poor damaged 9 @ 12 cents. Public sales for the 2nd and 16th December are announced.

PROVISIONS.—During the first part of the month Beef and Pork were extremely dull, especially the latter, which sold, perhaps, lower than at any time previous, but toward the close revived, and on Beef an advance of 50 cents @ $1 was obtained. We quote Mess, $7·50 @ $8·25; Prime, $4·50 @ 5·25. Mess Pork, $9·25 @ $10; and Prime $7 @ $8. Large sales of Lard have been made for export at 6 1-2 cents, may now be quoted 6 1-2 @ 8 cents. Prime Butter 20 cents. Western Dairy 15 @ 17, and Ordinary 10 @ 14 cents. New Hams sell at 9 1-2 cents. Shoulders 5 1-2 @ 6 cents. Bacon Sides and Dressed Hogs 4 cts. per pound.

RICE.—At the commencement of the month some *new* made its appearance at market, and small sales were made at $4 @ $4·12 1-2 ₱ 100 lbs., but towards the close, the stock being abundant, declined to $3·75, and the market unsettled in consequence of the large receipts. There have been very few sales for export.

SEEDS.—Timothy has advanced from $13·50 (the lowest point,) to $16, with sales, and although the article is out of season, we understand there is a large order in market which cannot be filled even at that rate. Clover has continued very scarce and prices have gradually advanced until Wednesday, when, owing to recent foreign advices, a sale of 40 tierces was made for export at 13c. Eighty bushels Canary to arrive coastwise, (not yet here,) brought $6, cash. There have been no receipts for a considerable time past.

TOBACCO.—Throughout the month has been very inactive, the demand being chiefly for home consumption, but towards the close there was a trifling inquiry for the Mediterranean and Africa markets without any change in prices. Foreign is plenty and dull.

WOOL.—The demand has been very small and confined principally to the dealers. A sale of Spanish was made by auction at 31 1-2 @ 47 1-2c. 4, 6 and 8 mos. We quote

Am. Saxony, fleece, lb.	— 48	@	— 50
American full blood Merino,	— 42	@	— 45
American half and three-quarter Merino,	— 35	@	— 37
American Native and one-quarter Merino,	— 25	@	— 30
Superfine, pulled,	— 36	@	— 40
No. 1. do.	— 34	@	— 36
No. 2. do.	— 25	@	— 28
South-American, washed,	— 8	@	— 10
Santa American, washed and picked,	— 16	@	— 18
South American, unwashed,	— 6	@	— 8
African,	— 7½	@	— 12½
Smyrna,	— 9	@	— 14
Mexican,	— 11½	@	— 12½

CATTLE.—The supply of Beeves has been large, principally from this state, but including a considerable number from the south. The sales have ranged from $4 @ $6·75, $4 @ $6·75 closing heavily at $4 @ $6·50, average $5·25 ₱ 100 lbs. Sheep and Lambs have been plentiful and sold principally at $1·25 @ $4 closing at $1·25 @ $4·50 for sheep, and for lambs $1 @ $2·50 to $1 @ $2·25.

HAY—Has not been very plenty, but equal to the demand, and steady at 93c. @ $1·06½ ₱ 100 lbs.

HIDES.—The stock is large for the season, dealers well supplied and the prices 1c. ₱ lb. lower than could have been realized one or two months since.

A LARGER BEET STILL.—Master John Lansing, son of the Hon. R. Lansing, of Waterloo village, N. Y. raised this season, a blood beet measuring 2 feet 9 inches in circumference, and weighing 22 lbs. with the tops off.

N. Y. State Ag. Society.

THE Annual Meeting of the New York State Agricultural Society will be held in the city of Albany on the 18th and 19th days of January next. The exhibition of Butter and Cheese, and specimens of Field Crops, will be held on the first day of the meeting.

The County Societies are requested to transmit the reports, required by the statute to be made to the Executive Committee of the State Society, to the care of the Recording Secretary, Albany, at as early a day as possible.

Dec. 1. LUTHER TUCKER, *Recording Secretary*

Notices to Correspondents, &c.

COMMUNICATIONS have come to hand during the past month, from James M. Garnett, D. S. Howard, W. & F. Scott, Index, J. Harland, C.W. Kelly, J.W. Booth, L. A. Morrell, Farmer Hodge, F. Burt, John Johnston, J. F. Osborn, Tyler Fountain, R. N. Parkhill, A Floridian, Wm. Partridge, J. B. D., N. B. Moore, An "Onondaga Farmer," H. M. Gaylord, Seth Whalen, Wm. R. Olden, N. N. D., S. Robinson, S. W. Jewett, C. N. Bement, Garret Bergen, Pearl, Jacob Vreeland.

The inquiry of James Pierce, Esq. is answered in the advertisement of Mr. Mott, which will appear on the sheet with the Index. He has our thanks for his suggestions, though we do not feel authorized to comply with them.

CORRECTION.—The communication of L. A. M., last number, page 175, for "soundness of the plan," read, "sacredness of the place."

Acknowledgments.

WE have received during the past month,

From H. L. Ellsworth, Esq. Commissioner of Patent Office, an Appendix to the "Letters on the Wabash Valley," embracing several letters on improving prairie lands, from which we shall draw largely hereafter for the benefit of our readers.

From Jordon L. Mott, N. Y. one of his Patent Agricultural Furnaces, heretofore noticed in this paper, for which he has our thanks. (See notice on Advertising Sheet, which will accompany the index.)

From Wiley & Putnam, N. Y. a copy of "The Poultry Yard," a Practical view of the best method of selecting, rearing, and breeding Domestic Fowls, by Peter Boswell, just republished by them from the second English edition.

From Dayton & Saxton, publishers N. Y., Bradford's handsome octavo vol. entitled, "American Antiquities and Researches into the Origin and History of the Red Race."

From their respective editors, "Professor Silliman's American Journal of Science and Arts"—"The North American Review"—The weekly numbers of the "New Farmer's Journal"—and the "Mark Lane Express," London.

From John Johnston, Esq. Geneva, "The Dumfries Courier containing an account of the last meeting of the Highland Ag. Society.

From J. F. Osborn and Wm. Ingells, beautiful specimens of Indian corn.

From R. & E. Allen, Fayette county, Ky., a pamphlet containing the portraits and pedigrees of the Berkshire hogs, owned by them.

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Subscriptions for the Cultivator

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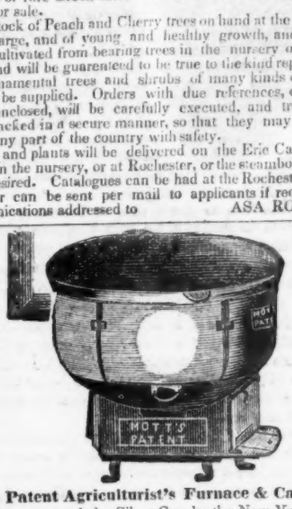
A GREATLY increased stock of Fruit Trees, Ornamental Trees, Shrubs, and Herbaceous Plants, and a large assortment of rare Green House Plants and Bulbous roots constantly for sale.

The stock of Peach and Cherry trees on hand at the present time is large, and of young and healthy growth, and were mostly cultivated from bearing trees in the nursery or its vicinity, and will be guaranteed to be true to the kind represented. Ornamental trees and shrubs of many kinds of large size can be supplied. Orders with due references, or with money enclosed, will be carefully executed, and trees and plants packed in a secure manner, so that they may be carried to any part of the country with safety.

Trees and plants will be delivered on the Erie Canal one mile from the nursery, or at Rochester, or the steamboat landing if desired. Catalogues can be had at the Rochester Seed Store, or can be sent per mail to applicants if requested. Communications addressed to ASA ROWE.



Mott's Patent Agriculturist's Furnace & Cauldron

HAS been awarded a Silver Cup, by the New-York State Agricultural Society, a Silver Medal by the American Institute, a Silver Medal by the Manufacturers' and Mechanics' Association at Boston; besides premiums at the Fairs of several county agricultural societies.

In every instance heard from, it has given the user better satisfaction than he had anticipated.

For a description of this most useful article, the proprietor respectfully refers to the "Cultivator" Extra, for December, 1840, and to the October number, page 165, for the present year.

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They are now sold at manufacturer's prices, transportation and expenses added:

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J. L. MOTT, 264 Water st., N. Y.

To whom all applications for State, County or Foundry rights, which will be sold, with patterns, upon favorable terms, must be addressed, and all letters not covering orders, post paid. No Furnaces sent out on commission.

Grime's Patent Smut Machine.

THE Committee of the New-York Agricultural Society report, that they have examined with great satisfaction "*Grimes' Patent Smut Machine*," presented by Mr. J. Durkee, of Utica; and in all its parts they have found it simple and permanent in its construction, and in a manner to preclude the possibility of heat. They have also viewed one of the machines in operation and its performance upon a very smutty quality of wheat, so much so as to be unsaleable in any market—and with a single operation of this machine, was rendered pure and clean.

The committee, with much pleasure, observe that in their opinion, this machine surpasses all others which have come within their knowledge, in many years experience in the milling business; and they deem the introduction of it of great importance to millers and wheat growers, and most cheerfully award a premium of Twenty Dollars to Mr. Durkee, in accordance with the resolution of the State Agricultural Society to award new premiums in cases of no competition, when the implement is highly meritorious.—*Rep. of Com.*

The subscriber keeps on hand a supply of Grimes' Patent Smut Machines, and will supply orders from any part of the State of New-York. J. DURKEE.

Utica, November, 1841.

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Rochester, N. Y. 1842.

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Flora of North America, by John Torrey, M. D. and Asa Gray, M. D. part 2 of vol 2.

Boswell's Poultry Yard; a practical view of the best method of selecting, rearing, and breeding the various species of Domestic Fowls. 1 vol. 18 mo.

They have also for sale,

Davy's Agricultural Chemistry, 6th ed. with Notes by Dr. J. Davy, with 10 large plates, 8vo. $1.50. London, 1840.

De Candolle's Vegetable Organography, translated, 2 vols. 8vo, $3. London, 1840.

Dickson on the Management of Poultry etc. 12mo. $1.50. London.

Don's Gardeners' and Botanists' Dictionary, or General History of Plants, 4 large vols. 4to, new in boards, 2*l*. 12s.

Eaton & Wright's Botany of North America, 8vo, $4. Troy, 1840.

The Flower Garden, its cultivation, arrangement etc., with list of plants, etc, 12mo, colored plates, cloth, gilt, $3. London, 1839.

Liebig's Organic Chemistry, and its Application to Agriculture, edited by L. Playfair, 8vo, $3.50. London, 1840.

Lindley's Guide to the Orchard and Kitchen Garden, $5. London.

London's Encyclopædia of Agriculture, $11. London.

London's Encyclopædia of Gardening, $11. London.

London's Encyclopædia of Plants, $18. London.

London's Encyclopædia of Cottage, Farm, and Villa Architecture, $15. London.

London's Suburban Gardener, 8vo. $5.50. London.

Low's Elements of Practical Agriculture, new edit. 8vo, $5.50. London.

Low's Illustrations of the Domestic Animals of Great Britain, a splendid work, with plates finely colored, folio, part I. to VI. each, $6.50. London, 1840.

Mackintosh's Flower Garden, 12mo, cloth, gilt, $3. London.

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Paxton's Magazine of Botany, a splendid and valuable work, with large plates accurately and finely colored from Nature, vols. 1 to 6 each, royal 8vo, half-morocco, gilt edges, per vol. $10. London, 1835—40.

Tusser's Five Hundred Points of Good Husbandry, (a quaint old work,) new ed. 8vo, $2.50. London, 1812.

Russell's Treatise on Practical and Chemical Agriculture, etc. 8vo, half-bound, $3.50. Leamington, Eng. 1841.

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THE subscribers have for sale, at their Nursery, near Macedonville on the Erie canal,

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Boston, Dec. 1841.

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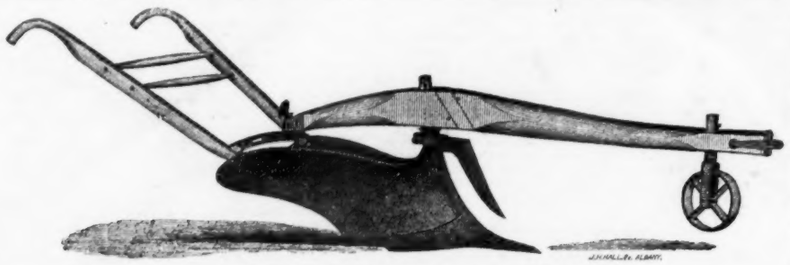

Barnaby & Mooers' Patent Side Hill and Level Land Plow,

TO which was awarded the highest premium (a silver cup) by the American Institute, at their Annual Fair and Plowing Match for 1840, and the first premium, a *Gold Medal*, at their Plowing Match for 1841; being considered the most valuable plow for general purposes. Also the honorary premium of $30 by the New-York State Agricultural Society, at their test of plows at Syracuse, 1841.

The undersigned of Ithaca, Tompkins Co. N. Y., is now at the date hereof, the sole proprietor of the Patent Right for the states of Maine, Connecticut, New-Jersey, Ohio, North Carolina, and Georgia. Also the undivided half and joint owner with H. Mooers of the following counties in the State of New-York, viz: Chautauque, Cattaraugus, Erie, Niagara, Orleans, Genesee, Wyoming, Allegany, Steuben, Livingston, Monroe, Ontario, Wayne, Seneca, Chemung, Tioga, Oswego, Cayuga, Cortland, Jefferson, St. Lawrence, Lewis and Hamilton. The proprietor offers to sell, on reasonable terms, the right of manufacturing and vending the above plow, either by states or counties, as may suit applicants, and in all cases furnish patterns of the various sizes, if required.

The orders of farmers and others for plows, directed to Ithaca, Tompkins Co. N. Y., will be promptly attended to, and forwarded according to directions to any of the above named territories, while the Patent Right shall continue to belong to the present owner.

The cut above is a correct representation of the plow, showing the whole of one side and a small part of the mold-board on the opposite side, and in way of explanation would say, both sides of the plow are precisely alike, and the mold-boards so formed that they both serve as land side and mold-board, when used as such. The standard is round and serves as a pivot for the beam to revolve upon, allowing it to traverse on the cross piece between the handles, and when the beam lays near either of them, it is then parallel or in line with the mold-board on that side, and that one is then the land side, and the other serves as mold-board. In coming round to plow back, the plowman touches with the foot, the hold-fast passing through the socket on the end of the beam, pressing on it in the same manner as we do on a thumb latch to open a door, which disengages the hold-fast from a catch, the team at the same time by turning round carries the end of the beam to the opposite handle, where the hold-fast by a small spring behind it forces it into a catch as on the other side, confining the beam until removed as above described. The catches above referred to, can be moved towards or from the handles in a groove on the backside of the cross piece in order to make different width of furrow, which can be varied from eight to sixteen inches, and still wider when the furrow is thrown down hill.

This plow is of late invention, and is becoming popular with those that use it, and is already made in several counties in this State.

The premiums which have been awarded it, have always been for plowing done on *level ground*. For side hill it has no competitor. The advantages peculiar to this plow are several, and among them may be mentioned,

1st. It is either a right or left hand plow, admitting the furrows all to be laid one way.

2d. By the simple arrangement at the end of the beam already mentioned, the width of furrow can be varied as circumstances may require.

3d. By placing one of the catches in the hole for that purpose in the center of the cross piece to confine the beam, it then, at the same time, throws a furrow both ways, preparing it for plowing between corn or anything planted in rows, and is found very convenient for digging potatoes by plowing deep and splitting the rows or hills; also for ditching, and plowing in green sward, making what is called "green ridging," preparing it for planting corn, by throwing two furrows together and planting on the ridge. Allow me to say to farmers who have not adopted this plan, that I have seen great crops produced from such a process.

4th. If the farmer has side hill to plow, he is, with one of these, prepared for it; and last not least, I am convinced by many experiments I have made with a dynamometer and other methods, to ascertain the power necessary to do the work, that a plow on this principle admits of a form or construction of mold-board, not available in the common horizontal or swing plow, to render it of lighter draft.

Three sizes are now made; No. 3, weight of castings 70 lbs.; No. 4, 80 lbs.; and No. 5, 90 lbs. No. 4 and 5 sufficiently large for breaking up fallow ground or green sward, and No. 3, also in light soil or sandy loam.

The price is $10, $10.50 and $11, graded according to size. Coulter, if added, $1.50, and wheel $1.00 extra; shares 50 cents. JUSTUS SLATER.

Ithaca, Nov. 16, 1841.

Pitts' Separator.

THE subscriber would respectfully give notice, that he continues to manufacture his machines for Thrashing and Cleaning Grain, at the old establishment on Patroon's Creek in the city of Albany, N. Y.

He will furnish the Separator with or without Thrashers.

N. B. The Separator without the Thrasher is designed to receive and clean the grain as it comes from the common thrashing machine.

Price of Separator with the Thrasher $150, and without the Thrasher, to attatch to the *common* thrasher $85.

I also manufacture a first rate 4 horse sweep power which I sell at $100.

Any one who wishes to go into the manufacture of my Separators in any State, County or Town, not already disposed of, can do it on reasonable terms, and all letters post paid, wishing information on the subject, addressed to the subscriber will receive prompt attention.

JOHN A. PITTS.

Albany, November, 1841.

To Farmers.

THE writer, a young man 23 years of age, is desirous of obtaining a situation with some practical farmer; he has received a liberal education, and for a number of years has been engaged in mercantile pursuits, with the exception of the last eighteen months, during which time (being out of employ and from childhood having had a taste for farming,) he has devoted himself to the reading of agricultural works. He would prefer a situation with some farmer advanced in life, under whose guidance and direction he would be, and at the same time take charge of the farm, receiving for his service a share of the produce. He is active, persevering and fond of work, and is willing to go to any part of the country, provided it is healthy. Satisfactory testimonials of character, ability, &c. will be given.

Any person feeling disposed to make an arrangement with the writer, can hear further from him by stating his address through the columns of the Cultivator.

December, 1, 1841.—$2.

Very Valuable Farm in Ohio For Sale.

THE subscriber (wishing to employ all his means in commercial operations,) offers for sale *at a great bargain*, the celebrated "*Estramadura Farm.*" This is one of the best farms in the State of Ohio; situated 14 miles south of Massillon, Stark county, extending over a mile on the Ohio Canal; containing 408 acres of *very choice land*, (300 of which is under cultivation.) It is a part of the original farm noticed by "a Traveler," in the Oct. number of the Cultivator. It is admirably adapted either for *wheat* or *wool* growing; there being extensive accommodations for sheep on the premises, and in the immediate neighborhood of the principle *wheat market* in the state. For more particular information apply to the subscriber at Massilon, Ohio. JAMES L. REYNOLDS.

Mount Hope Garden & Nurseries, Rochester, N. Y.

THE proprietors of this establishment offer for sale a general assortment of nursery articles; comprising Fruit and Ornamental Trees, Flowering Shrubs and Plants, Tulips, Hyacinths and other Bulbous Flower Roots with a choice collection of Double Dahlias.

Also a large and fine collection of Green and Hot House Plants, including Chinese Monthly Roses, Geraniums, Chinese Azaleas, Cammelias, Cape Jasmine, Cactuses, &c. &c.

Orders, large or small, for any of the above, will be promptly and faithfully executed, and charges in all cases will be very moderate. A liberal discount will be made to those who are forming new establishments, or who wish to act as agents in their neigborhood.

Persons ordering from a distance may rely on having securely packed for transportation, and marked and shipped as their orders may designate, or if left to us, by the best route. Gardens or pleasure grounds will be laid out, and skillful gardeners furnished on reasonable notice, and information on any subject connected with the business, will be promptly and cheerfully imparted.

It is expected that persons unknown to the proprietors, will either accompany their orders with a remittance, or the name of a guarantee in the city of Rochester or vicinity. Address (post paid,) ELLWANGER & BARRY.

N. B. Our FRUIT TREES comprise the most desirable varieties, and their genuineness may be fully relied upon, as they all have been propagated from trees whose qualities have been sufficiently tested.

Rochester, November, 1841.

Prince's Nurseries and Gardens.

THE new Catalogues are now ready for distribution, *gratis*, to all who apply *post paid*, per mail. They comprise the immense assortment of Fruit and Ornamental Trees, Shrubbery, and Plants, Bulbous Flower Roots and Dahlias, Green House Plants, Garden Seeds, &c. All of which now are at much reduced prices. Orders per mail, to Wm. R. PRINCE, Flushing, will receive prompt attention.

Durham Short Horn Cattle.

THREE thorough bred Cows and two three year old Bulls. Herd-book animals; bred by the late Stephen Williams, Esq. Also, 30 Dishley or New Leicester Bucks and Ewes of great size and beauty. For sale by the subscriber, at Northborough, Worcester county, Mass.

B. D. WHITNEY.

South Down Sheep.

FOR sale, South Down Sheep raised from the stock of the Marquis of Torrington, as pure a breed of sheep as any in England. Enquire, (post-paid,) of CHARLES M. ARMSTRONG, near Newburgh, Orange county, N. Y.

THE NEW WORLD.

EDITED BY PARK BENJAMIN.

THIS well-known journal of Literature, Science, Art and Intelligence, continues to increase in the favor of the public as its merits become more widely known. The most distinguished literary men of the age, both in America and England, are engaged as contributors to its columns. Besides DONALD MACLEOD, resident of London, FRANCIS J. GRUND, in Bremen, and BRANTZ MAYER, in the city of Mexico, it has correspondents of the first order of talents in Constantinople, Africa, and other parts of the world, who will give to the New World an interest and value which no other paper on this continent can possess. Proof sheets and copies of popular works issued from the prolific press of England are received and given to the readers of the NEW WORLD in advance of their ordinary receipt in this country. All new discoveries and advances in the Sciences and Arts find an early place in its columns. Each number is embellished by one or more

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done in the best style of the art. These arrangements for the gratification of the readers of the NEW WORLD, which render it without a rival in this or any other country, have been made at a vast additional expense; and the proprietors feel a confidence that they will meet a full reward from the enlightened people of America.

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is published in the New World, and all new subscribers who commence with the present or 3d volume, will receive the 1st volume of this inimitable work gratis.

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Postmasters are authorized to remit subscriptions free of expense.

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"THE CULTIVATOR."

TO FARMERS AND GARDENERS.

THE CULTIVATOR, (a consolidation of Buel's Cultivator and the Genesee Farmer,) a monthly periodical, designed "to Improve the Mind and the Soil," and "to Elevate the Standing and Character of the Cultivators of the American Soil." WILLIS GAYLORD and LUTHER TUCKER, Editors. Published at Albany, (N. Y.) by Luther Tucker, proprietor, at One Dollar per annum—Six Copies for Five Dollars—20 per cent commission on twenty-five or more subscribers—25 per cent on one hundred or more. All subscriptions to commence with a volume. All payments to be made free of postage. ☞ The paper can be furnished from its commencement—Vols. 1, 2, 3 and 4 at 50 cents each; and Vols. 5, 6, 7 and 8, at $1.00 each.

The publisher of the Cultivator has the pleasure of presenting to the friends of Agriculture in the United States, the prospectus of a new volume (the 9th, commencing January 1, 1842,) of that periodical. This paper is so well known in every part of the country, as to render a recapitulation of its objects and contents, generally, unnecessary. The range and variety of its articles—its list of contributors, (embracing the most distinguished agriculturists in every section of the Union,) unrivaled in numbers as well as in scientific and practical skill—the superiority of its mechanical execution, and the unequaled number, rich variety and superior beauty of its illustrations, embracing in the last two volumes about

TWO HUNDRED ENGRAVINGS,

representing the improved breeds of

Cattle, Horses, Sheep, Swine, Buildings, Implements, &c.

and on every subject connected with agriculture, have contributed to render it a favorite with all classes interested in the cultivation of the soil, and given it a circulation hitherto unknown among the agricultural periodicals of the country—amounting to about

Twenty-Two Thousand!

Grateful for the very favorable consideration the work has received and the extensive patronage awarded, the publisher would state that NO EFFORTS OR EXPENSE will be spared to give *new* and *increased* interest to the volume for 1842. It is intended to devote a larger portion of the work, (at least *one page* monthly,) to the subjects of GARDENING and the ORCHARD; and to enlarge the department devoted to DOMESTIC AND RURAL ECONOMY, and to the DISEASES OF ANIMALS, so as to render them as useful as possible to *all classes of our citizens*. To accomplish this, such arrangements have been made as will place within our reach all European periodicals and publications important in agricultural and veterinary matters, and they will be made available in such a manner, as, in every respect, to render the Cultivator worthy the patronage it has received, and make it, all things considered, the

CHEAPEST AND BEST AGRICULTURAL PAPER

ever published in this or any other country.

Post-masters and all those kind friends who have heretofore with so much liberality and patriotism, as well as those who wish to "elevate the standing and character of the cultivators of the American Soil," are respectfully invited to use their influence in promoting its circulation by acting as agents in their respective neighborhoods.

LUTHER TUCKER,
Albany, December, 1841. Publisher of the Cultivator

☞ Editors with whom we exchange are requested to insert the above.